SCS ENGINEERS

REMEDIAL INVESTIGATION REPORT
ANGELES CHEMICAL COMPANY SITE
SANTA FE SPRINGS, CALIFORNIA
APPENDICES VOLUME II

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REMEDIAL INVESTIGATION REPORT
ANGELES CHEMICAL COMPANY SITE
SANTA FE SPRINGS, CALIFORNIA
APPENDICES VOLUME II

Prepared for:

Angeles Chemical Company
8915 Sorenson Avenue
Santa Fe Springs, California 90670

Prepared by:

SCS Engineers
3711 Long Beach Boulevard
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(310) 426-9544

August, 1994

File No. 0185016.01

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APPENDICES

Appendix A: Letter: DTSC's Imminent or Substantial Endangerment Order dated February 10, 1993

Appendix B: Laboratory Reports, Chain of Custody Documentation, and Well Permits

- Appendix B1: Laboratory Reports - Soil, January 1994 RI
- Appendix B2: Laboratory Reports - Water, February 1994 RI
- Appendix B3: Well Permits

Appendix C: CPT Data and Interpretation

Appendix D: Boring Logs, Well Construction Details, and Well Sampling Field Notes, and Survey Data

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APPENDIX A

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APPENDIX A

Letter: DTSC's Imminent or Substantial Endangerment Order Dated February 10, 1993

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CALIFORNIA - ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL
[illegible]
[illegible] NOVIEW AVENUE
[illegible] CA 91201
[illegible] 2800

February 10, 1993

CERTIFIED MAIL

L. R. & B., a Joint Venture
8915 Sorensen Avenue
Santa Fe Springs, California 90670

ANGELES CHEMICAL COMPANY, INC. SITE

Enclosed please find an IMMINENT OR SUBSTANTIAL ENDANGERMENT ORDER issued to you and other respondents. The Department has determined that there is a release or threatened release of hazardous substances at the above-captioned site. In addition, the Department suspects that the ground water contamination at the above-captioned site is migrating to the McKesson property which is down gradient and thereby contributing to the contamination of the McKesson property. In order to properly remediate the McKesson ground water contamination, it is necessary to identify and investigate all contributing sources of contamination. Consequently, the Department is issuing this order for the protection of the public health and/or the environment.

The Department understands that this order will have a significant impact on the respondents. In order to minimize the cost of remediating the site and expedite the implementation of the order the Department can provide guidance documents to develop a remedial investigation work plan, a remedial investigation report, a risk assessment report, and other required documents necessary to properly characterize and remediate the site.

If you wish to discuss this order with the Department you may call Douglas Suzuki at (818) 551-2856 to schedule a meeting.

Sincerely,

Hamid Saebfar
Acting Branch Chief
Site Mitigation Branch
Department of Toxic Substances Control

Enclosures

RETURN RECEIPT REQUESTED
P-471-076-870

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STATE OF CALIFORNIA
ENVIRONMENTAL PROTECTION AGENCY
DEPARTMENT OF TOXIC SUBSTANCES CONTROL

In the matter of: ANGELES CHEMICAL COMPANY, INC., a California Corporation 8915 Sorensen Avenue SANTA FE SPRINGS, CA 90670 L. R. & B., a Joint Venture 8915 Sorensen Avenue Santa Fe Springs, CA 90670 Mr. John G. Locke 20449 Rancho Los Cerritos Covina, CA 91724 Mrs. Janyce B. Locke 20449 Rancho Los Cerritos Covina, CA 91724 Mr. Robert O. Berg 93-A Surfside, CA 90743 Mrs. Donna M. Berg 93-A Surfside, CA 90743 Mr. Arnold Rosenthal 838 North Doheny Drive West Hollywood, CA 90069 Mrs. Pearl Rosenthal 838 North Doheny Drive West Hollywood, CA 90069	Docket No. I§S/E 92/93-012 IMMINENT OR SUBSTANTIAL ENDANGERMENT ORDER Health and Safety Code section 25358.3 (a)(1)

1.0 INTRODUCTION

1.1. Parties. The State of California, Environmental Protection Agency, Department of Toxic Substances Control (Department) issues this Imminent or Substantial Endangerment Order (Order) to: Angeles Chemical Company, Inc., a California corporation, L. R. & B., a Joint Venture, Mr. John G. Locke, an individual, Mrs. Janyce B. Locke, an individual,

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STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

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Mr. Robert O. Berg, an individual, Mrs. Donna M. Berg, an individual, Mr. Arnold Rosenthal, an individual, and Mrs. Pearl Rosenthal, an individual (Respondents).

1.1.2. Each and every Respondent which has been identified by the Department is a responsible party as that term is defined in Health and Safety Code, section 25323.5. There may be other responsible parties which may not have been identified thus far by the Department.

1.2. Site. This Order applies to the Site located at 8915 Sorensen Avenue in the city of Santa Fe Springs, County of Los Angeles, State of California. The Site is bounded by Sorensen Avenue on the east, an Atchison, Topeka, and Santa Fe Railroad right-of-way on the south, the Liquid Air Corporation property on the west, and the PLAS-TAC Manufacturing Company property on the north. The exact boundaries of land impacted by the contamination caused by past activities at the Site are unknown at this time. A map of the general area is attached as Exhibit 1.

1.3. Jurisdiction. Section 25358.3(a)(1) of the Health and Safety Code authorizes the Department to issue an Order when the Department determines that there may be an imminent or substantial endangerment to the public health or welfare or to the environment, because of a release or a threatened release of hazardous substances, to any responsible party or parties to take appropriate removal or remedial action necessary to protect the public health and safety and the environment.

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2.0 FINDINGS OF FACT

2.1. Ownership of Property/Leasing of Property.

2.1.1. Prior to May 1975, Southern Pacific Transportation Company (SPTC) owned the site. The site was used as an agricultural field to grow strawberries.

2.1.2. Mr. John G. Locke, an individual, Mrs. Janyce B. Locke, an individual, Mr. Arnold Rosenthal, an individual, Mrs. Pearl Rosenthal, an individual, Mr. Robert O. Berg, an individual, and Mrs. Donna M. Berg, an individual (Respondents) formed a joint venture called the L. R. & B., a joint venture (LRB). The joint venture purchased the site from SPTC in or about May 1975 and continues to own the site to the present date.

2.1.3. In January 1976, the Angeles Chemical Company, Inc. (ACC) leased the property from LRB. ACC operates a chemical distribution facility, repackaging bulk hazardous materials into various size containers for resale to their customers. ACC continues to lease and operate on the site.

2.2. Physical Description of Site. The site is on approximately 1.9 acre parcel of land located in an industrial portion of the city of Santa Fe Springs. The site generally slopes to the Southwest in a direction towards the Southern Pacific Transportation Railroad tracks.

2.2.1 The site contains 22 under-ground storage tanks and 4 above-ground storage tanks on the south side of the site. These tanks contain the hazardous material product destined to be repackaged. In addition, ACC has an additional under-

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STATE OF CALIFORNIA

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ground waste storage tank, the contents of which are unknown.

2.2.2. The drums of repackaged hazardous materials are stored on the north east side of the site.

2.3. Site History. The real property is owned by LRB. ACC leased the site beginning on or about January 1976 to operate a chemical distribution business. ACC repackages petroleum solvents and chemicals into various size containers for resale to their customers.

The following are two known releases on the site:

1) On April 12, 1984, approximately 10 gallons of Acetate were released on site. The Santa Fe Springs Fire Department supervised the clean up of the Acetate.

2) On June 6, 1984, approximately 50 gallons of kerosene were released on site. The Santa Fe Springs Fire Department supervised the clean up of the Kerosene.

2.3.1. ACC conducted an initial under-ground tank investigation under the supervision of the Los Angeles County - Department of Public Works. The purpose of the investigation was to identify any contamination from their under-ground tanks. Substances found in the soil and ground water samples are those identified in paragraph 2.4.

2.3.2. The Los Angeles County Fire Department's Hazardous Materials Section is currently ordering ACC to conduct additional soil investigations at the south east and south west areas of the site.

2.4. Substances Found at the Site. In the subsurface soil samples, thirteen different volatile compounds, which are

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also hazardous substances, were identified. They include acetone, benzene, 2-butanone (Methyl Ethyl Ketone [MEK]), 1,1 dichloroethane (1,1-DCA), 1,1 dichloroethene (1,1-DCE), ethylbenzene, methylene chloride, 4-methyl-2-pentanone (methyl isobutyl ketone [MIBK]), tetrachloroethene (PERC), toluene, 1,1,1-trichloroethane (1,1-TCA), trichloroethene (TCE), and xylenes.

In the ground water samples, eight different volatile compounds, which are also hazardous substances, were identified. They include benzene, 1,1 dichloroethane (1,1-DCA), toluene, xylenes, tetrachloroethene (PERC), 1,1 dichloroethene (1,1-DCE), 1,1,1-trichloroethane (1,1-TCA), and trichloroethene (TCE).

2.4.1. Benzene is a known human carcinogen. Acute poisoning from benzene exposure has an affect on the human Central Nervous System. Benzene poisoning can occur through inhalation of vapors and absorption through the skin.

2.4.2. Trichloroethylene (TCE) is a possible human carcinogen, cause reproductive and tumorogenic affects and a strong skin and eye irritant. Chronic exposure to TCE can cause irreparable damage to the liver and other organs. Exposure can occur through ingestion, respiration, and adsorption through the skin.

2.4.3. Tetrachloroethene (PERC) is a possible human carcinogen and a skin and eye irritant. Exposure to PERC can cause damage to the central nervous system and the liver. Exposure can occur through ingestion, inhalation, and

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STD 113 (REV. 8-72)

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adsorption through the skin.

2.5. Population at Risk. The site is located within a half a mile radius of an industrial/commercial area. The workers/employees will be the initial population exposed to any air borne emissions. Exposure can occur through ingestion, inhalation, and adsorption through the skin. See also paragraph 2.6.2.

2.5.1. The nearest school is within a mile from the site. There are several other schools within two miles of the site.

2.5.2. The Presbyterian and another church are located within a mile and a half of the site.

2.5.3. There are several parks within two miles of the site.

2.6. Routes of Exposure. The routes of exposure from the constituents in the soil and ground water are from inhalation, ingestion, and dermal pathways.

2.6.1. The site workers are potentially at risk of being exposed to the air borne soil contaminants during daily work (moving trucks, wind dispersion, etc.) and any excavation activities. The potential routes of exposure are from inhalation, ingestion, and dermal pathways.

2.6.2. The population (identified in paragraph 2.5) and/or the environment is potentially at risk of being exposed to the soil and ground water contaminants. The air borne soil contaminants are a potential risk to the surrounding community of up to 1/2 a mile. The Gage aquifer is the closest upper aquifer to the site and would be the first aquifer affected by

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the ground water contaminants. The Gage aquifer merges with the Hollydale aquifer northeast of the site (up gradient). The City of Santa Fe Springs has one production water (drinking) well in the Hollydale aquifer, which is located approximately nine miles south of the site (down gradient). In addition, the City of Santa Fe Springs has two deeper production water (drinking) wells. One well is approximately 0.5 miles north of the site and is drawing water from the Silverado and Sunnyside aquifers (lower than the Gage and Hollydale aquifers). The other well is approximately 2 miles west of the site and is drawing water from the Silverado aquifer. The water quality data from samples of the two wells have indicated the presence of TCE and PCE constituents in the ground water. There exists a possible inter-connection between the upper and lower aquifers due to the geological characteristics.

3.0 CONCLUSIONS OF LAW

3.1. The substances, described above, are "hazardous substances" as defined by Health and Safety Code, Section 25316.

3.2. The Respondents are responsible persons or parties as defined by Health and Safety Code, Section 25319, 25360, and 25385.1(g).

3.3. The past, present and potential migration of hazardous substances from the site into the soil and ground water constitutes an actual or threatened "release" as defined in Health and Safety Code, Section 25320.

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STATE OF CALIFORNIA
STD 113 (REV. 8-72)
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4.0 DETERMINATIONS

4.1. Based on the foregoing Findings of Fact and Conclusions of Law, the Department has determined that:

a. There maybe an imminent or substantial endangerment to the public health or welfare or to the environment, because of a release or threatened release of hazardous substances from the site.

b. The Respondents are responsible parties who are required to take the actions ordered below to protect the public health and safety and environment.

c. The remedial actions set forth in this Order are necessary to respond to releases or threatened releases of hazardous substances at and from the site.

5.0 ORDER

Based on the foregoing FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DETERMINATIONS, IT IS HEREBY ORDERED THAT Respondents conduct the following remedial activities in the manner specified herein, and in accordance with a schedule specified by the Department as follows:

6.0 REMOVAL ACTIONS

6.1. The Respondents shall submit to the Department for review and approval a detailed work plan and implementation schedule which covers all the activities necessary to stabilize all un-contained hazardous substances on site. These activities may include but are not limited to:

a. Placement of the material into containers;

b. Removal of the material for off-site disposal;

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c. Application of a protective cover to prevent direct contact and dispersal; and

d. Construction of fencing and appropriate posting of signs to restrict access.

The work plan must be approved by the Department prior to the commencement of any removal activities.

7.0 REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

7.1. Work plan Submission. Within 45 calendar days of the effective date of this Order, the Respondents shall submit to Department for review and approval a detailed work plan and implementation schedule which covers all the activities necessary to conduct a complete remedial investigation and feasibility study of the site and any areas where there is a release or threatened release of hazardous substances from the site. The work plan and activities under it shall, at a minimum, conform to the National Contingency Plan (40 CFR Part 300), as amended, and the U.S. Environmental Protection Agency's "Guidance on Remedial Investigation under CERCLA" and "Guidance on Feasibility Studies under CERCLA" both dated June 1985, as amended, as well as state laws and regulations.

7.2. Work plan Objectives. The objectives of the Work plan are to:

a. Determine the nature and full extent of contamination of air, soil, surface water and ground water at the site and adjacent areas;

b. Identify all existing and potential migration pathways, including the direction, rate and dispersion

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of contaminant migration;

c. Identify and evaluate appropriate remedial measures to prevent future releases and mitigate any releases which have already occurred; and

d. Collect and evaluate the information necessary to prepare a remedial action plan in accordance with the requirements of Health and Safety Code, Section 25356.1.

7.3. Work plan Contents. The work plan shall cover each of the following elements: remedial investigation, remedial investigation report, feasibility study and feasibility study report and shall contain a schedule for implementation of each element.

7.3.1. The remedial investigation portion of the work plan shall include at least the following elements:

a. A history of the site including a list of the hazardous materials used on-site and their estimated volumes and concentrations, a description of all manufacturing processes which are or were related to each hazardous material or produced any hazardous waste, and a site map delineating each area where hazardous materials and/or hazardous wastes were disposed, treated, stored, transferred, transported, handled or used;

b. A summary of all air, soil, surface water and ground water assessment work completed to date, including data reduction and interpretation of the data;

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STATE OF CALIFORNIA
STD. 113 (REV. 8-72)

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c. A description of the activities which will be undertaken to develop a complete profile of on-site and off-site air, soil, surface water and ground water contamination attributable to operations at the site;

d. Sampling protocols for air, surface water, standing liquid, ground water, sediment, surface soil and subsurface soil;

e. Analytic and quality control protocols for all sampling and analysis programs including:

(1) adequate sample identification;

(2) sample preservation techniques;

(3) chain of custody procedures;

(4) use of DHS approved analytical methods;

(5) identification of qualified person(s) conducting the sampling; and

(6) identification of a certified laboratory which will perform the analyses;

f. A description of locations where sampling will occur, and a list of chemical analyses to be performed;

g. Engineering specifications for all installations such as ground water monitoring wells and piezometers;

h. A description of provisions for gaining access to and obtaining samples from adjacent properties, where appropriate;

i. A description of how the date obtained pursuant to this Order will be managed and preserved by the Respondents in accordance with paragraph 9.14;

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j. A site health and safety plan which covers all measures including contingency plans which will be taken to protect persons on and off the site from exposure to hazardous wastes, substances or materials during activities under the work plan; and

k. A public participation plan for informing local residents about activities at the site and responding to inquiries from concerned citizens.

7.3.2. The remedial investigation report portion of the work plan shall describe the steps necessary to submit this report in compliance with paragraph 7.4.

7.3.3. The feasibility study portion of the work plan shall include at least the following elements:

a. A summary of the existing and potential hazards for which corrective action is required;

b. A description of the alternative remedial actions which will be evaluated;

c. A list of the technologies which will be screened for each alternative remedial action described in (b) above;

d. A description of the factors which will be considered in screening and analyzing each alternative remedial action technology, including, but not limited to, effectiveness, reliability, timeliness of implementation, unit cost, availability, operation and maintenance costs and conformity with applicable laws and regulations;

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STATE OF CALIFORNIA
STD 113 (REV. 8-72)

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e. A list of the criteria for screening and analyzing the alternative remedial action technologies; and

f. A description of all pilot studies, bench tests or other activities which will be performed to evaluate each alternative remedial action technology.

7.3.4. The feasibility study report portion of the work plan shall describe the steps necessary to submit this report in compliance with paragraph 7.5.

7.4. Remedial Investigation Report. The remedial investigation report shall be submitted by the Respondents to Department for review and approval in accordance with the approved work plan schedule. The remedial investigation report shall summarize the results of the remedial investigation including reduction and interpretation of all data and information generated and/or compiled during the remedial investigation. The remedial investigation report shall cover the following subjects relating to the site.

a. Introduction

1. Overview of Report
2. The Site Background Information
3. Nature and Extent of Problems
4. Remedial Investigation Summary

b. The Site Features Investigation

1. Demography
2. Land Use
3. Natural Resources
4. Climatology

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c. Hazardous Substance Investigation

1. Waste Types

2. Waste Component Characteristics and Behavior

d. Hydrogeologic Investigation

1. Soils

2. Geology

3. Ground Water

e. Surface Water Investigation

1. Surface Water

2. Sediments

3. Flood Potential

4. Drainage

f. Air Investigation

g. Biota Investigation

1. Flora

2. Fauna

h. Bench and Pilot Tests

i. Public Health and Environmental Concerns

1. Potential Receptors

2. Public Health Impacts

3. Environmental Impacts

j. Public Participation Plan

7.5. Feasibility Study Report. The feasibility study report shall be submitted by the Respondents to Department for review and approval in accordance with the approved work plan schedule. The feasibility study report shall summarize the results of the feasibility study including reduction and

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STD 113 (REV. 8-72)

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interpretation of all data and information generated and/or compiled during the feasibility study. The feasibility study shall cover the following subjects relating to the site.

a. Description of Current Situation

1. The Site Background Information

2. Nature and Extent of Release

3. Objective of Remedial Actions

b. Screening of Remedial Action Technologies

1. Technical Criteria

2. Remedial Action Alternatives Developed

3. Environmental and Public Health Criteria

4. Other Screening Criteria

5. Cost Criteria

c. Analysis of Remedial Action Alternatives

1. Technical Feasibility

2. Environmental Evaluation

3. Institutional Requirements

4. Public Health Evaluation

5. Cost Analysis

d. Recommended Remedial Action

7.6. Work plan Implementation. The Respondents shall implement the work plan as approved by Department in accordance with the approved schedule.

8.0 REMEDIAL ACTION PLAN

8.1. Draft Remedial Action Plan. Within 30 calendar days of Department's approval of the feasibility study report, the Respondents shall prepare and submit to Department for

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STATE OF CALIFORNIA
STD 113 (REV 8-72)

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review and approval a draft Remedial Action Plan (RAP) and the California Environmental Quality Act (CEQA) documents. The RAP shall set forth in detail appropriate steps to remedy air, soil, surface water and ground water contamination at the site and adjacent areas. The RAP shall be prepared in accordance with the standards and requirements set forth in Health and Safety Code, Section 25356.1. In addition, the RAP shall contain a schedule for implementation of all removal and remedial actions proposed to be taken. The CEQA documents shall be prepared in accordance with CEQA requirements.

8.2. Implementation of Final Remedial Action Plan. Within 60 days after Department's approval of the final RAP in accordance with Health and Safety Code, Section 25356.1, the Respondents shall submit to Department a detailed RAP work plan containing technical and operational plans and engineering designs for implementation of the approved remedial or removal action alternatives, and a schedule for implementing the construction phase. The work plan shall also describe the nature and design of the construction or equipment to be employed, a site specific hazardous waste transportation plan (if necessary), the identity of any contractors, transporters and other persons conducting the removal and remedial activities for the site, post remedial sampling and monitoring procedures for air, soil, surface water, and ground water, and shall cover all of the subjects described in paragraph 7.3.1 subdivisions (d), (e), (f), (g), (h), (i), (j) and (k) as they pertain to the removal and remedial activities. The schedule

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submitted with the work plan shall provide that all approved removal or remedial actions excluding operation and maintenance shall be completed by May 5, 1995.

8.2.1. Upon Department approval of the RAP work plan and schedule, the Respondents shall implement the final RAP as approved in accordance with the approved RAP work plan and the schedule for implementing the construction phase as specified in paragraph 8.2., above.

8.2.2. The Respondents shall be responsible for all operation and maintenance requirements in accordance with the final RAP and RAP work plan.

8.2.3. During the implementation of the final RAP and RAP work plan the Department may specify such additions, modifications and revisions to the RAP work plan as it deems appropriate to implement the RAP.

8.2.4. Any remedial technology employed in implementation of the final RAP shall be left in place and operated by the Respondents until and except to the extent that the Department determines and states in writing that the Respondents may discontinue or modify some or all of such remedial technology because the Respondents have met the criteria specified in the final RAP for discontinuance of such technology or because such modifications would better achieve the goals of the final RAP.

9.0 OTHER PROVISIONS

9.1. Project Coordinator. Within 15 calendar days of the effective date of this Order, the Respondents shall submit to the Department in writing, the name and address of a Project

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Coordinator whose responsibilities will be to receive all notices, comments, approvals, and other communications from the Department to the Respondents.

9.2. Project Engineer/Geologist. The work performed pursuant to this Order shall be under the direction and supervision of a qualified registered professional engineer or a registered geologist in the State of California with expertise in hazardous waste site cleanup.

9.3. Monthly Activity Reports. Within 30 calendar days of the effective date of this Order and monthly thereafter, the Respondents shall submit a Monthly Activity Report of its activities under the provisions of this Order. The Monthly Activity Report shall describe:

(a) The specific actions taken by or on behalf of the Respondents during the previous month;

(b) The actions expected to be undertaken during the current month;

(c) All planned activities for the following month;

(d) Any requirements under this Order that were not completed;

(e) Any problems or anticipated problems in complying with this Order; and

(f) A summary of all results of sample analyses, tests and other data generated or received by the Respondents under this Order.

The Monthly Activity Report shall be received by the Department no later than ten (10) days after the reporting

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month ends.

9.4. Incorporation of Documents. All plans, schedules, reports, specifications, and other documents required or submitted by the Respondents pursuant to this Order are, upon written approval by the Department, incorporated in this Order and shall be implemented by the Respondents as approved. Any noncompliance with such documents shall be noncompliance with this Order.

9.5. Exhibits. All Exhibits attached hereto are incorporated herein by this reference.

9.6. Submittals and Approvals. All submittals and notifications from the Respondents required by this Order shall be in writing and sent simultaneously to:

Mr. Hamid Saebfar
Acting Branch Chief
Department of Toxic Substances Control
ATTN: Angeles Chemical Company
1011 N. Grandview Avenue
Glendale, California 91201

Dr. Robert P. Ghirelli
Executive Officer
California Regional Water Quality Control Board
101 Centre Plaza
Monterey Park, California 91754

Mr. Bill Jones
Chief Investigative Section
Health Hazardous Materials Division
5825 Rickenbacker Road
Commerce, California 90040

Mr. George Baker
County of Los Angeles
Department of Health Services
Hazardous Materials Control Program
7300 East Alondra, Suite 203
Paramount, California 90723

All approvals and decisions of the Department made

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regarding such submittals and notifications shall be communicated to the Respondents in writing by the Site Mitigation Branch Chief, Department of Toxic Substances Control or his/her designee. No informal advice, guidance, suggestions, or comments by the Department regarding reports, plans, specifications, schedules or any other writing prepared or submitted by or for the Respondents shall be construed to relieve the Respondents of their obligation to obtain such formal approvals as may be required herein.

9.7. Department Review and Approval. If the Department determines that any report, plan, schedule or other document submitted for approval pursuant to this Order fails to comply with this Order or fails to protect public health, public safety, or the environment, the Department may:

(a) Modify the document as deemed necessary and approve the document as modified; or

(b) Return the document to the Respondents with recommended changes and a date by which the Respondents must submit to the Department a revised document incorporating the recommended changes.

9.8. Modifications. The Department reserves the right to unilaterally modify this Order. Any modification to this Order shall be effective upon issuance and deemed incorporated in this Order.

9.9. Time Periods. Unless otherwise specified, time periods begin from the effective date of this Order and "days" means calendar days. The effective date of this Order is the

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date of issuance by the Department.

9.10. Extension Requests. If, for any reason, the Respondents are unable to perform any activity or submit any document within the time required under this Order, the Respondents may request, in writing, an extension of the time specified. The extension request shall include a justification for the delay. All such requests shall be in advance of the date on which the activity or document is due.

9.11. Extension Approvals. If the Department determines, that good cause exists for an extension as set forth in Paragraph 9.10 the Department may grant the request and specify in writing a new schedule. The Respondents shall comply with the new schedule.

9.12. Endangerment During Implementation. In the event that the Department determines that any circumstances or activities (whether or not pursued in conformance with this Order) are creating an imminent or substantial endangerment to the health and safety and welfare of persons on the site or in the surrounding area, or to the environment, the Department may issue a Stop Work Order to the Respondents to stop further implementation of this Order for such period of time as needed to abate the endangerment. Any deadline contained in this Order which is directly affected by a Stop Work Order under this section shall be extended for the term of such Stop Work Order.

9.13. Site Access. Access to the Site and laboratories used for analyses of samples under this Order shall be

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provided at all reasonable times to employees, contractors, and consultants of the Department. Nothing in this paragraph is intended or shall be construed to limit in any way the right of entry or inspection that the Department or any other agency may otherwise have by operation of law. The Department and its authorized representatives shall have the authority to enter and move freely about all property at the Site at all reasonable times for purposes including, but not limited to:

(a) Inspecting records, operating logs, sampling and analytical data, and contracts relating to this Site;

(b) Reviewing the progress of the Respondents in carrying out the terms of this Order;

(c) Conducting such tests as the Department may deem necessary; and

(d) Verifying the data submitted to the Department by the Respondents.

9.14. Sampling, Data and Document Availability. The Respondents shall permit the Department and its authorized representative to inspect and copy all sampling, testing, monitoring or other data generated by the Respondents or on behalf of the Respondents in any way pertaining to work undertaken pursuant to this Order. The Respondents shall inform the Department at least two (2) days in advance of all field sampling under this Order and shall allow the Department and its authorized representatives to collect duplicates of any samples collected pursuant to this Order. The Respondents shall maintain a central depository of the data, reports, and

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other documents prepared pursuant to this Order. All such data, reports, and other documents shall be preserved by the Respondents for a minimum of six (6) years after the conclusion of all activities under this Order. If the Department requests that some or all of these documents be preserved for a longer period of time, the Respondents shall either comply with that request or deliver the documents to the Department. The Respondents shall notify the Department in writing at least six (6) months prior to destroying any documents prepared pursuant to this Order.

9.15. Penalties for Noncompliance. Failure to comply with the provisions of this Order, or with any reports, plans, specifications, schedules, or other documents incorporated as part of this Order pursuant to Paragraph 9.4., may subject the Respondents to civil penalties in addition to cost recovery as specified in Paragraph 9.16.

9.16. Cost Recovery. Failure or refusal of the Respondents to comply with this Order may make the Respondents liable for any government costs incurred, including those payable from the Hazardous Substance Account or the Hazardous Substance Cleanup Fund for any response action at the Site, as provided in Health and Safety Code, Section 25360 and other applicable provisions of law. These costs include the Department's direct, indirect, and administrative overhead costs. Cost recovery may also be pursued by the Department under CERCLA.

9.16.1. Past Costs. Within sixty (60) days of receipt of

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an invoice, the Respondents shall reimburse the Department for all past costs related to the Site and incurred prior to issuance of this Order. The Department will deduct the amounts of:

(a) Fees paid by the Respondent; and

(b) Any payments on past invoices.

9.16.2. Future Costs. The Respondents shall be liable for all costs and fees owing to the Department or the Board of Equalization in accordance with applicable law. The Respondents shall pay all fees for oversight assessed pursuant to Health and Safety Code, Section 25347.6 upon billing by the Board of Equalization. The Department has determined that the Site is a medium sized site, however, the site size may be revised based upon the receipt of further information. The Department reserves any and all rights under applicable law to recover all costs expended for oversight of response activities at the Site which are above the fees paid under Health and Safety Code, Section 25347.6.

9.17. Additional Enforcement Actions. By issuance of this Order, the Department does not waive the right to take any further enforcement actions.

9.18. Compliance with Applicable Laws. The Respondents shall carry out this Order in compliance with all applicable local, State, and Federal requirements, including, but not limited to, requirements to obtain permits and assure worker safety.

9.19. Government Liabilities. The State of California

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shall not be liable for any injuries or damages to persons or property resulting from acts or omissions by the Respondents, and related parties specified in Paragraph 9.22 in carrying out the activities pursuant to this Order, nor shall the State of California be held as party to any contract entered into by the Respondents or its agents in carrying out activities pursuant to this Order.

9.20. Reservation of Rights. Nothing in this Order is intended or shall be construed to limit the rights of any of the parties hereto with respect to claims arising out of or relating to the deposit or disposal at any other location of substances removed from the Site. Nothing in this Order is intended or shall be construed to limit or preclude the Department from taking any other action authorized by law to protect the public health and welfare or the environment and recovering costs thereof.

9.21. Severability. The requirements of this Order are severable, and the Respondents shall comply with each and every provision hereof notwithstanding the effectiveness of any other provision.

9.22. Parties Bound. This order applies to and is binding upon the Respondents, and its officers, directors, agents, employees, contractors, consultants, receivers, trustees, successors and assignees, including but not limited to, individuals, partners, and subsidiary and parent corporations and upon any successor agency of the State of California that may have responsibility for and jurisdiction

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over the subject matter of this Order.

IT IS SO ORDERED THIS TENTH DAY OF FEBRUARY, 1993.

Hamid Saebfar
Acting Branch Chief
Department of Toxic Substances Control

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EXHIBIT 1

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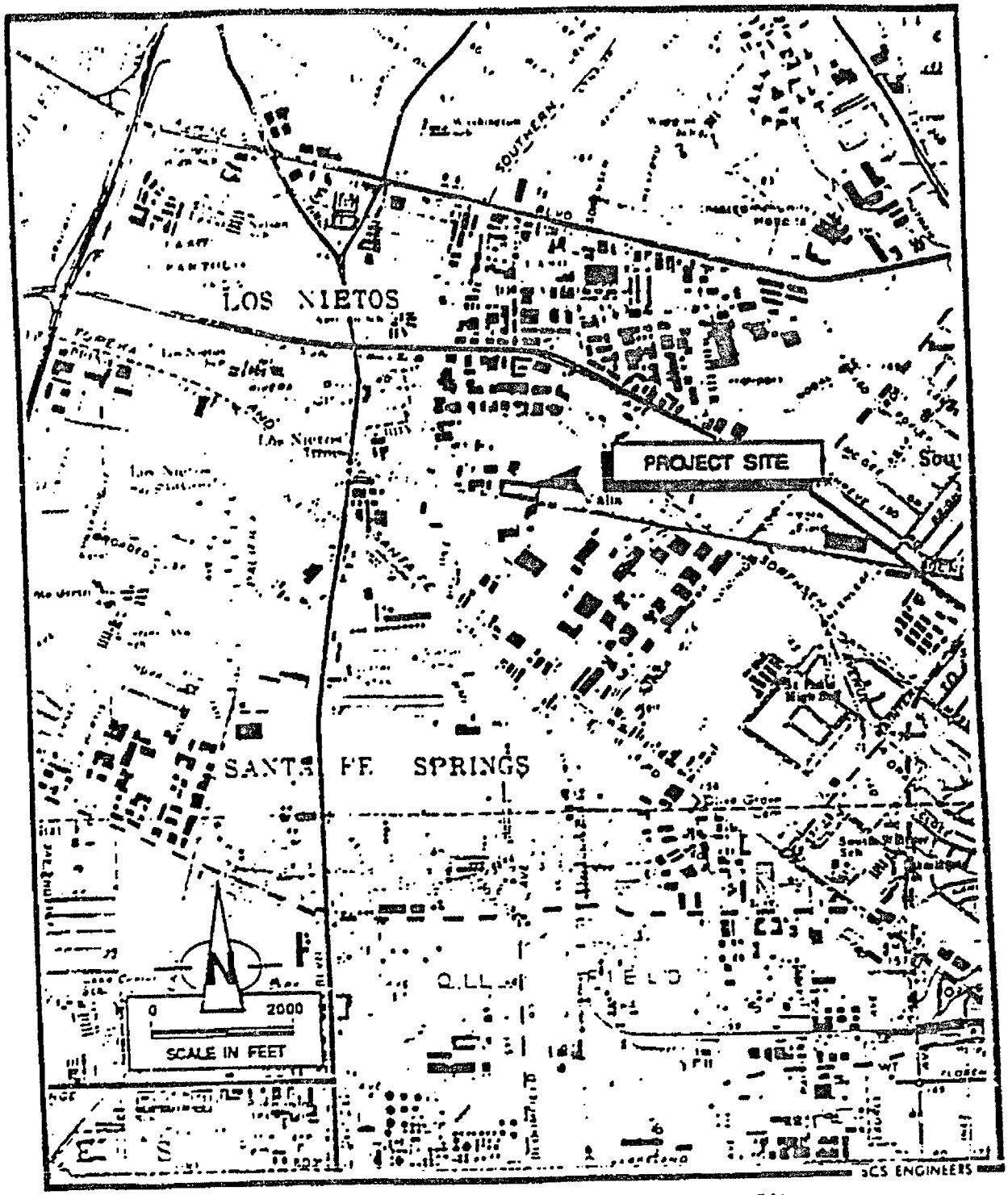

Figure 1. Map Showing Location of Project Site.

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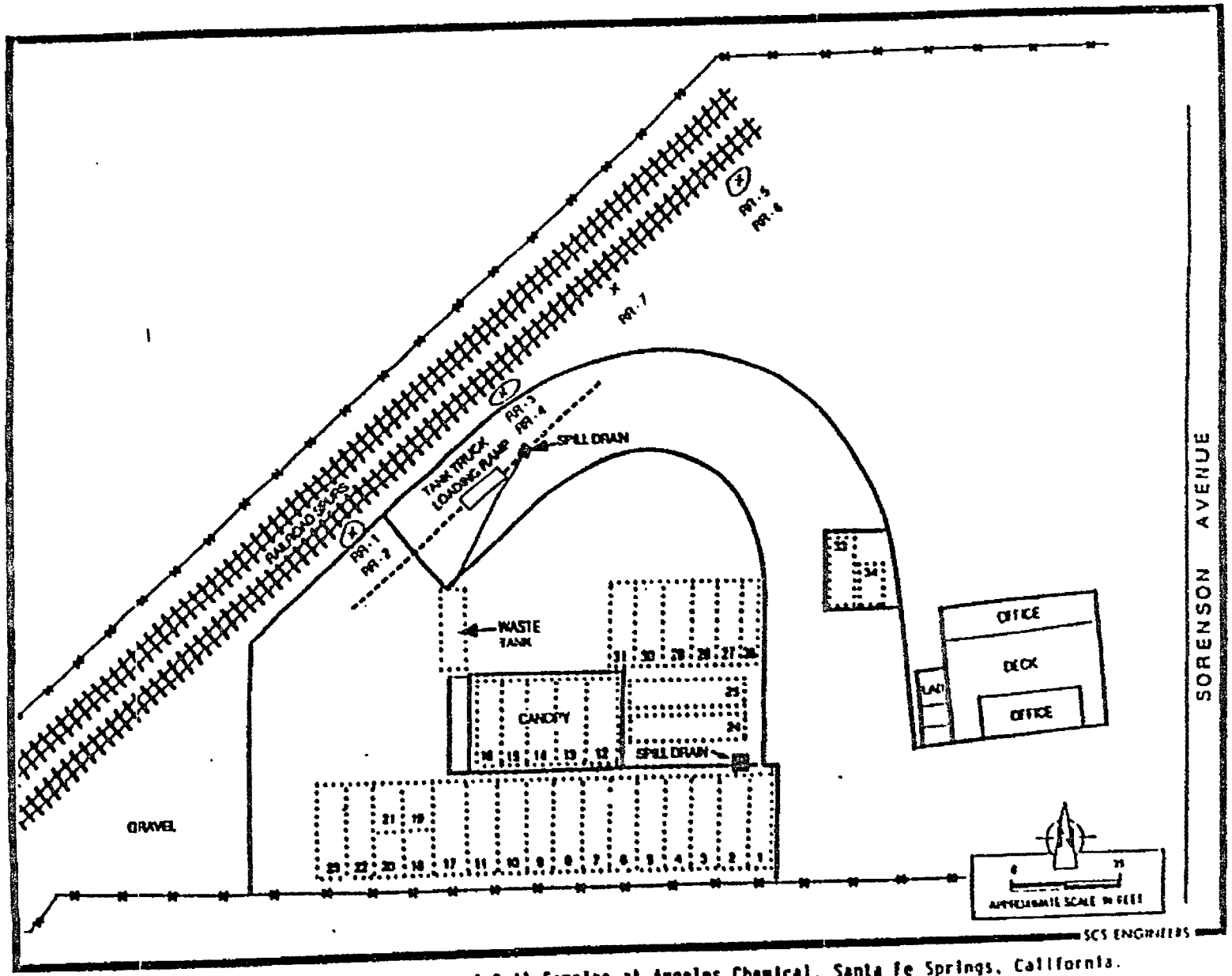

Figure 2. Approximate Locations of Soil Samples at Angeles Chemical, Santa Fe Springs, California.

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PROOF OF SERVICE

1. I served the following documents:

a. Imminent or Substantial Endangerment Order

Docket Number IHS/E 92/93-012

b. (Name): L. R. & B., a Joint Venture

c. By serving: /X/ Responsible Party/Respondent

/_/ Other (Name and Title):

_____

_____

2. a. /_/ By personally delivering copies to (address) ___

_____

at (time) _____ on (date) _____.

b. /X/ By mailing copies by first-class certified mail, Certified Mail Receipt No. P-471-076-870, return receipt requested, in a sealed envelope addressed to:

L. R. & B., a Joint Venture
8915 Sorensen Avenue
Santa Fe Springs, California 90670

3. At the time of service I was at least 18 years of age and not a party to this action.

4. My name, business address, and telephone number are:

Mr. Douglas M. Suzuki
California Environmental Protection Agency
Department of Toxic Substances Control
1011 N. Grandview Avenue
Glendale, California 91201
(818) 551-2856

I declare under penalty of perjury that the foregoing is true and correct and that this declaration is executed on February 10, 1993 (date) at Glendale, California (place).

_____
(Signature)

SM.06
(1.93)

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APPENDIX B

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APPENDIX B

Laboratory Reports, Chain of Custody Documentation, and Well Permits

Appendix B1: Laboratory Reports - Soil, January 1994 RI

Appendix B2: Laboratory Reports - Water, February 1994 RI

Appendix B3: Well Permits

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Appendix B1: Laboratory Reports - Soil, January 1994 RI

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SCS ANALYTICAL LABORATORY
[illegible] WALNUT AVENUE
LONG BEACH, CALIFORNIA 90806
(310) 595 9124
FAX (310) 595 8709

MEMO

TO: Brian Watterson

January 20, 1994

JOB NO.: 0185016.01
FOLDER NO.: 1436

LABORATORY REPORT

Samples: Forty two (42) soil samples from Angeles Chemical, Santa Fe Springs, collected on 01/05/94, 01/06/94 and 01/07/94, received on 01/07/94. Twenty three (23) samples to be analyzed, the remainder to be archived.

EPA 8240 - see attached sheets.

Reviewed by	Approved by

A1436.rep

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Addendum Report, EPA 8240

Sample I.D.: BH 15-1
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
67-64-1	Acetone	4,480	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	8	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	193	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	462	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	269	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	218	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	198	30

R.L. = Reporting Limit
ND = Not Detected

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Addendum Report, EPA 8240 (Cont.)

Sample I.D.: BH 15-1
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	6,330	5
108-88-3	Toluene	1,300	5
71-55-6	1,1,1-Trichloroethane	20,900	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	27	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	14,200	5
95-47-6	o-Xylene	29,000	5

R.L. = Reporting Limit
ND = Not Detected

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Addendum Report, EPA 8240

Sample I.D.: BH 15-5
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	9,380	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	1,590	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	74	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	10	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: BH 15-5
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	11	5
108-88-3	Toluene	24	5
71-55-6	1,1,1-Trichloroethane	109	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	12	5
95-47-6	o-Xylene	11	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: BH 15-10
Date Received: 01/07/94
Date Analyzed: 01/17/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	67	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

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Addendum Report, EPA 8240 (Cont.)

Sample I.D.: BH 15-10
Date Received: 01/07/94
Date Analyzed: 01/17/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	6	5
71-55-6	1,1,1-Trichloroethane	5	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

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Addendum Report, EPA 8240

Sample I.D.: BH15-20
Date Received: 01/07/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	261	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

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Addendum Report, EPA 8240 (Cont.)

Sample I.D.: BH15-20
Date Received: 01/07/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: BH16-1
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	10,100	500
107-02-8	Acrolein	ND	500
107-13-1	Acrylonitrile	ND	500
71-43-2	Benzene	ND	50
75-27-4	Bromodichloromethane	ND	50
75-25-2	Bromoform	ND	50
74-83-9	Bromomethane	ND	300
78-93-3	2-Butanone	23,400	500
75-15-0	Carbon Disulfide	ND	50
56-23-5	Carbon Tetrachloride	ND	50
108-90-7	Chlorobenzene	ND	50
124-48-1	Chlorodibromomethane	ND	50
75-00-3	Chloroethane	ND	300
110-75-8	2-Chloroethyl Vinyl Ether	ND	500
67-66-3	Chloroform	ND	50
74-87-3	Chloromethane	ND	300
124-48-1	Dibromochloromethane	ND	50
74-95-3	Dibromomethane	ND	50
541-73-1	1,3-Dichlorobenzene	ND	50
106-46-7	1,4-Dichlorobenzene	ND	50
95-50-1	1,2-Dichlorobenzene	ND	50
110-56-5	1,4-Dichloro-2-butene	ND	50
75-71-8	Dichlorodifluoromethane	ND	50
75-34-3	1,1-Dichloroethane	ND	50
107-06-2	1,2-Dichloroethane	ND	50
75-35-4	1,1-Dichloroethylene	ND	50
156-60-5	trans-1,2-Dichloroethene	ND	50
78-87-5	1,2-Dichloropropane	ND	50
10061-01-5	cis-1,3-Dichloropropene	ND	50
10061-02-6	trans-1,3-Dichloropropene	ND	50
64-17-5	Ethanol	ND	50
100-41-4	Ethylbenzene	ND	50
97-63-2	Ethyl Methacrylate	ND	50
591-78-6	2-Hexanone	ND	300
74-88-4	Iodomethane	ND	50
75-09-2	Methylene Chloride	ND	500
108-10-1	4-Methyl-2-Pentanone	ND	300

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: BH16-1
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
100-42-5	Styrene	ND	50
79-34-5	1,1,2,2-Tetrachloroethane	ND	50
127-18-4	Tetrachloroethene	ND	50
108-88-3	Toluene	ND	50
71-55-6	1,1,1-Trichloroethane	ND	50
79-00-5	1,1,2-Trichloroethane	ND	50
79-01-6	Trichloroethene	ND	50
75-69-4	Trichlorofluoromethane	ND	50
96-18-4	1,2,3-Trichloropropane	ND	50
108-05-4	Vinyl Acetate	ND	300
75-01-4	Vinyl Chloride	ND	300
1330-20-7	m- and p-Xylenes	ND	50
95-47-6	o-Xylene	ND	50

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: BH16-5
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	2,180	500
107-02-8	Acrolein	ND	500
107-13-1	Acrylonitrile	ND	500
71-43-2	Benzene	ND	50
75-27-4	Bromodichloromethane	ND	50
75-25-2	Bromoform	ND	50
74-83-9	Bromomethane	ND	300
78-93-3	2-Butanone	52,000	500
75-15-0	Carbon Disulfide	ND	50
56-23-5	Carbon Tetrachloride	ND	50
108-90-7	Chlorobenzene	ND	50
124-48-1	Chlorodibromomethane	ND	50
75-00-3	Chloroethane	ND	300
110-75-8	2-Chloroethyl Vinyl Ether	ND	500
67-66-3	Chloroform	ND	50
74-87-3	Chloromethane	ND	300
124-48-1	Dibromochloromethane	ND	50
74-95-3	Dibromomethane	ND	50
541-73-1	1,3-Dichlorobenzene	ND	50
106-46-7	1,4-Dichlorobenzene	ND	50
95-50-1	1,2-Dichlorobenzene	ND	50
110-56-5	1,4-Dichloro-2-butene	ND	50
75-71-8	Dichlorodifluoromethane	ND	50
75-34-3	1,1-Dichloroethane	ND	50
107-06-2	1,2-Dichloroethane	ND	50
75-35-4	1,1-Dichloroethylene	ND	50
156-60-5	trans-1,2-Dichloroethene	ND	50
78-87-5	1,2-Dichloropropane	ND	50
10061-01-5	cis-1,3-Dichloropropene	ND	50
10061-02-6	trans-1,3-Dichloropropene	ND	50
64-17-5	Ethanol	ND	50
100-41-4	Ethylbenzene	ND	50
97-63-2	Ethyl Methacrylate	ND	50
591-78-6	2-Hexanone	ND	300
74-88-4	Iodomethane	ND	50
75-09-2	Methylene Chloride	ND	500
108-10-1	4-Methyl-2-Pentanone	ND	300

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: BH16-5
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result µg/kg(ppb)	R.L.
100-42-5	Styrene	ND	50
79-34-5	1,1,2,2-Tetrachloroethane	ND	50
127-18-4	Tetrachloroethene	ND	50
108-88-3	Toluene	ND	50
71-55-6	1,1,1-Trichloroethane	55	50
79-00-5	1,1,2-Trichloroethane	ND	50
79-01-6	Trichloroethene	61	50
75-69-4	Trichlorofluoromethane	ND	50
96-18-4	1,2,3-Trichloropropane	ND	50
108-05-4	Vinyl Acetate	ND	300
75-01-4	Vinyl Chloride	ND	300
1330-20-7	m- and p-Xylenes	ND	50
95-47-6	o-Xylene	ND	50

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: BH16-10
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	500
107-02-8	Acrolein	ND	500
107-13-1	Acrylonitrile	ND	500
71-43-2	Benzene	ND	50
75-27-4	Bromodichloromethane	ND	50
75-25-2	Bromoform	ND	50
74-83-9	Bromomethane	ND	300
78-93-3	2-Butanone	11,600	500
75-15-0	Carbon Disulfide	ND	50
56-23-5	Carbon Tetrachloride	ND	50
108-90-7	Chlorobenzene	ND	50
124-48-1	Chlorodibromomethane	ND	50
75-00-3	Chloroethane	ND	300
110-75-8	2-Chloroethyl Vinyl Ether	ND	500
67-66-3	Chloroform	ND	50
74-87-3	Chloromethane	ND	300
124-48-1	Dibromochloromethane	ND	50
74-95-3	Dibromomethane	ND	50
541-73-1	1,3-Dichlorobenzene	ND	50
106-46-7	1,4-Dichlorobenzene	ND	50
95-50-1	1,2-Dichlorobenzene	ND	50
110-56-5	1,4-Dichloro-2-butene	ND	50
75-71-8	Dichlorodifluoromethane	ND	50
75-34-3	1,1-Dichloroethane	ND	50
107-06-2	1,2-Dichloroethane	ND	50
75-35-4	1,1-Dichloroethylene	ND	50
156-60-5	trans-1,2-Dichloroethene	ND	50
78-87-5	1,2-Dichloropropane	ND	50
10061-01-5	cis-1,3-Dichloropropene	ND	50
10061-02-6	trans-1,3-Dichloropropene	ND	50
64-17-5	Ethanol	ND	50
100-41-4	Ethylbenzene	ND	50
97-63-2	Ethyl Methacrylate	ND	50
591-78-6	2-Hexanone	ND	300
74-88-4	Iodomethane	ND	50
75-09-2	Methylene Chloride	ND	500
108-10-1	4-Methyl-2-Pentanone	ND	300

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: BH16-10
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
100-42-5	Styrene	ND	50
79-34-5	1,1,2,2-Tetrachloroethane	ND	50
127-18-4	Tetrachloroethene	ND	50
108-88-3	Toluene	ND	50
71-55-6	1,1,1-Trichloroethane	6	50
79-00-5	1,1,2-Trichloroethane	ND	50
79-01-6	Trichloroethene	ND	50
75-69-4	Trichlorofluoromethane	ND	50
96-18-4	1,2,3-Trichloropropane	ND	50
108-05-4	Vinyl Acetate	ND	300
75-01-4	Vinyl Chloride	ND	300
1330-20-7	m- and p-Xylenes	ND	50
95-47-6	o-Xylene	ND	50

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: BH16-20
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
67-64-1	Acetone	ND	500
107-02-8	Acrolein	ND	500
107-13-1	Acrylonitrile	ND	500
71-43-2	Benzene	ND	50
75-27-4	Bromodichloromethane	ND	50
75-25-2	Bromoform	ND	50
74-83-9	Bromomethane	ND	300
78-93-3	2-Butanone	ND	500
75-15-0	Carbon Disulfide	ND	50
56-23-5	Carbon Tetrachloride	ND	50
108-90-7	Chlorobenzene	ND	50
124-48-1	Chlorodibromomethane	ND	50
75-00-3	Chloroethane	ND	300
110-75-8	2-Chloroethyl Vinyl Ether	ND	500
67-66-3	Chloroform	ND	50
74-87-3	Chloromethane	ND	300
124-48-1	Dibromochloromethane	ND	50
74-95-3	Dibromomethane	ND	50
541-73-1	1,3-Dichlorobenzene	ND	50
106-46-7	1,4-Dichlorobenzene	ND	50
95-50-1	1,2-Dichlorobenzene	ND	50
110-56-5	1,4-Dichloro-2-butene	ND	50
75-71-8	Dichlorodifluoromethane	ND	50
75-34-3	1,1-Dichloroethane	ND	50
107-06-2	1,2-Dichloroethane	ND	50
75-35-4	1,1-Dichloroethylene	ND	50
156-60-5	trans-1,2-Dichloroethene	ND	50
78-87-5	1,2-Dichloropropane	ND	50
10061-01-5	cis-1,3-Dichloropropene	ND	50
10061-02-6	trans-1,3-Dichloropropene	ND	50
64-17-5	Ethanol	ND	50
100-41-4	Ethylbenzene	82	50
97-63-2	Ethyl Methacrylate	ND	50
591-78-6	2-Hexanone	ND	300
74-88-4	Iodomethane	ND	50
75-09-2	Methylene Chloride	ND	500
108-10-1	4-Methyl-2-Pentanone	ND	300

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: BH16-20
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	50
79-34-5	1,1,2,2-Tetrachloroethane	ND	50
127-18-4	Tetrachloroethene	471	50
108-88-3	Toluene	125	50
71-55-6	1,1,1-Trichloroethane	ND	50
79-00-5	1,1,2-Trichloroethane	ND	50
79-01-6	Trichloroethene	ND	50
75-69-4	Trichlorofluoromethane	ND	50
96-18-4	1,2,3-Trichloropropane	ND	50
108-05-4	Vinyl Acetate	ND	300
75-01-4	Vinyl Chloride	ND	300
1330-20-7	m- and p-Xylenes	318	50
95-47-6	o-Xylene	104	50

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 4-5
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result µg/kg (ppb)	R.L. µg/kg (ppb)
67-64-1	Acetone	1,640	500
107-02-8	Acrolein	ND	500
107-13-1	Acrylonitrile	ND	500
71-43-2	Benzene	ND	50
75-27-4	Bromodichloromethane	ND	50
75-25-2	Bromoform	ND	50
74-83-9	Bromomethane	ND	300
78-93-3	2-Butanone	1,990	500
75-15-0	Carbon Disulfide	ND	50
56-23-5	Carbon Tetrachloride	ND	50
108-90-7	Chlorobenzene	ND	50
124-48-1	Chlorodibromomethane	ND	50
75-00-3	Chloroethane	ND	300
110-75-8	2-Chloroethyl Vinyl Ether	ND	500
67-66-3	Chloroform	ND	50
74-87-3	Chloromethane	ND	300
124-48-1	Dibromochloromethane	ND	50
74-95-3	Dibromomethane	ND	50
541-73-1	1,3-Dichlorobenzene	ND	50
106-46-7	1,4-Dichlorobenzene	ND	50
95-50-1	1,2-Dichlorobenzene	ND	50
110-56-5	1,4-Dichloro-2-butene	ND	50
75-71-8	Dichlorodifluoromethane	ND	50
75-34-3	1,1-Dichloroethane	54	50
107-06-2	1,2-Dichloroethane	ND	50
75-35-4	1,1-Dichloroethylene	ND	50
156-60-5	trans-1,2-Dichloroethene	ND	50
78-87-5	1,2-Dichloropropane	ND	50
10061-01-5	cis-1,3-Dichloropropene	ND	50
10061-02-6	trans-1,3-Dichloropropene	ND	50
64-17-5	Ethanol	ND	50
100-41-4	Ethylbenzene	ND	50
97-63-2	Ethyl Methacrylate	ND	50
591-78-6	2-Hexanone	ND	300
74-88-4	Iodomethane	ND	50
75-09-2	Methylene Chloride	ND	500
108-10-1	4-Methyl-2-Pentanone	594	300

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 4-5
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	50
79-34-5	1,1,2,2-Tetrachloroethane	ND	50
127-18-4	Tetrachloroethene	ND	50
108-88-3	Toluene	ND	50
71-55-6	1,1,1-Trichloroethane	ND	50
79-00-5	1,1,2-Trichloroethane	ND	50
79-01-6	Trichloroethene	ND	50
75-69-4	Trichlorofluoromethane	ND	50
96-18-4	1,2,3-Trichloropropane	ND	50
108-05-4	Vinyl Acetate	ND	300
75-01-4	Vinyl Chloride	ND	300
1330-20-7	m- and p-Xylenes	ND	50
95-47-6	o-Xylene	ND	50

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 4-10
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	2,130	500
107-02-8	Acrolein	ND	500
107-13-1	Acrylonitrile	ND	500
71-43-2	Benzene	ND	50
75-27-4	Bromodichloromethane	ND	50
75-25-2	Bromoform	ND	50
74-83-9	Bromomethane	ND	300
78-93-3	2-Butanone	4,260	500
75-15-0	Carbon Disulfide	ND	50
56-23-5	Carbon Tetrachloride	ND	50
108-90-7	Chlorobenzene	ND	50
124-48-1	Chlorodibromomethane	ND	50
75-00-3	Chloroethane	ND	300
110-75-8	2-Chloroethyl Vinyl Ether	ND	500
67-66-3	Chloroform	ND	50
74-87-3	Chloromethane	ND	300
124-48-1	Dibromochloromethane	ND	50
74-95-3	Dibromomethane	ND	50
541-73-1	1,3-Dichlorobenzene	ND	50
106-46-7	1,4-Dichlorobenzene	ND	50
95-50-1	1,2-Dichlorobenzene	ND	50
110-56-5	1,4-Dichloro-2-butene	ND	50
75-71-8	Dichlorodifluoromethane	ND	50
75-34-3	1,1-Dichloroethane	ND	50
107-06-2	1,2-Dichloroethane	ND	50
75-35-4	1,1-Dichloroethylene	ND	50
156-60-5	trans-1,2-Dichloroethene	ND	50
78-87-5	1,2-Dichloropropane	ND	50
10061-01-5	cis-1,3-Dichloropropene	ND	50
10061-02-6	trans-1,3-Dichloropropene	ND	50
64-17-5	Ethanol	ND	50
100-41-4	Ethylbenzene	ND	50
97-63-2	Ethyl Methacrylate	ND	50
591-78-6	2-Hexanone	ND	300
74-88-4	Iodomethane	ND	50
75-09-2	Methylene Chloride	ND	500
108-10-1	4-Methyl-2-Pentanone	ND	300

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 4-10
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
100-42-5	Styrene	ND	50
79-34-5	1,1,2,2-Tetrachloroethane	ND	50
127-18-4	Tetrachloroethene	ND	50
108-88-3	Toluene	ND	50
71-55-6	1,1,1-Trichloroethane	71	50
79-00-5	1,1,2-Trichloroethane	ND	50
79-01-6	Trichloroethene	ND	50
75-69-4	Trichlorofluoromethane	ND	50
96-18-4	1,2,3-Trichloropropane	ND	50
108-05-4	Vinyl Acetate	ND	300
75-01-4	Vinyl Chloride	ND	300
1330-20-7	m- and p-Xylenes	ND	50
95-47-6	o-Xylene	ND	50

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 4-20
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	10,000
107-02-8	Acrolein	ND	10,000
107-13-1	Acrylonitrile	ND	10,000
71-43-2	Benzene	ND	1,000
75-27-4	Bromodichloromethane	ND	1,000
75-25-2	Bromoform	ND	1,000
74-83-9	Bromomethane	ND	6,000
78-93-3	2-Butanone	ND	10,000
75-15-0	Carbon Disulfide	ND	1,000
56-23-5	Carbon Tetrachloride	ND	1,000
108-90-7	Chlorobenzene	ND	1,000
124-48-1	Chlorodibromomethane	ND	1,000
75-00-3	Chloroethane	ND	6,000
110-75-8	2-Chloroethyl Vinyl Ether	ND	10,000
67-66-3	Chloroform	ND	1,000
74-87-3	Chloromethane	ND	6,000
124-48-1	Dibromochloromethane	ND	1,000
74-95-3	Dibromomethane	ND	1,000
541-73-1	1,3-Dichlorobenzene	ND	1,000
106-46-7	1,4-Dichlorobenzene	ND	1,000
95-50-1	1,2-Dichlorobenzene	ND	1,000
110-56-5	1,4-Dichloro-2-butene	ND	1,000
75-71-8	Dichlorodifluoromethane	ND	1,000
75-34-3	1,1-Dichloroethane	ND	1,000
107-06-2	1,2-Dichloroethane	ND	1,000
75-35-4	1,1-Dichloroethylene	ND	1,000
156-60-5	trans-1,2-Dichloroethene	ND	1,000
78-87-5	1,2-Dichloropropane	ND	1,000
10061-01-5	cis-1,3-Dichloropropene	ND	1,000
10061-02-6	trans-1,3-Dichloropropene	ND	1,000
64-17-5	Ethanol	ND	1,000
100-41-4	Ethylbenzene	16,600	1,000
97-63-2	Ethyl Methacrylate	ND	1,000
591-78-6	2-Hexanone	ND	6,000
74-88-4	Iodomethane	ND	1,000
75-09-2	Methylene Chloride	ND	10,000
108-10-1	4-Methyl-2-Pentanone	12,000	6,000

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 4-20
Date Received: 01/07/94
Date Analyzed: 01/14/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	1,000
79-34-5	1,1,2,2-Tetrachloroethane	ND	1,000
127-18-4	Tetrachloroethene	98,900	1,000
108-88-3	Toluene	48,700	1,000
71-55-6	1,1,1-Trichloroethane	54,700	1,000
79-00-5	1,1,2-Trichloroethane	ND	1,000
79-01-6	Trichloroethene	16,500	1,000
75-69-4	Trichlorofluoromethane	ND	1,000
96-18-4	1,2,3-Trichloropropane	ND	1,000
108-05-4	Vinyl Acetate	ND	6,000
75-01-4	Vinyl Chloride	ND	6,000
1330-20-7	m- and p-Xylenes	49,000	1,000
95-47-6	o-Xylene	12,000	1,000

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 7-5
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	12	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 7-5
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 7-10
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 7-10
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 7-20
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	117	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	147	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 7-20
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 5-2
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 5-2
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	21	5
108-88-3	Toluene	8	5
71-55-6	1,1,1-Trichloroethane	5	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	13	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 5-5
Date Received: 01/07/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result µg/kg(ppb)	R.L. µg/kg(ppb)
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	31	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 5-5
Date Received: 01/07/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	19	5
108-88-3	Toluene	6	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	7	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	16	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 5-10
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 5-10
Date Received: 01/07/94
Date Analyzed: 01/17/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	9	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 5-20
Date Received: 01/07/94
Date Analyzed: 01/17/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
67-64-1	Acetone	974	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	529	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 5-20
Date Received: 01/07/94
Date Analyzed: 01/17/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 2-5
Date Received: 01/07/94
Date Analyzed: 01/17/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 2-5
Date Received: 01/07/94
Date Analyzed: 01/17/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 2-10
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result µg/kg(ppb)	R.L.
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 2-10
Date Received: 01/07/94
Date Analyzed: 01/ /94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 2-20
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	97	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tatrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 2-20
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 2-30
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	10	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	37	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 2-30
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	33	5
108-88-3	Toluene	15	5
71-55-6	1,1,1-Trichloroethane	69	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	24	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 2-40
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result µg/kg (ppb)	R.L.
67-64-1	Acetone	1,102	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	720	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	30	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	102	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	113	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	352	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 2-40
Date Received: 01/07/94
Date Analyzed: 01/18/94
Matrix: Soil
Project #: 0185016.01
File #: A1436.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	194	5
108-88-3	Toluene	168	5
71-55-6	1,1,1-Trichloroethane	88	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	387	5
95-47-6	o-Xylene	107	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Appendix B1: Laboratory Reports - Soil, January 1994 RI

Processed by KOPY KAT

Quality Assurance Addendum Report

EPA 8240

Surrogate Spikes

Lab ID	$DCAd_4$	$Told_8$	BFB
	% Recovery		
1436-5	90	114	94
1436-6	83	99	90
1436-7	87	102	78
1436-9	84	103	74
1436-11	84	103	85
1436-12	82	98	86
1436-13	83	104	83
1436-15	85	103	88
1436-17	86	102	79
1436-18	83	102	78
1436-20	86	107	99
1436-22	81	100	72
1436-23	85	102	73
1436-25	83	101	74
1436-26	85	108	67
1436-27	83	100	76
1436-28	83	100	73
1436-29	83	103	69
1436-32	87	103	70
1436-33	90	105	65
1436-35	87	100	73
1436-37	83	100	74
1436-39	88	102	103

Matrix Spikes

Lab ID 1436-6	MS	MSD	RPD(%)	Control Limits
	% Recovery			
1,1-Dichloroethene	103	86	18	57/139
Benzene	91	98	7	80/119
Trichloroethene	93	95	2	78/126
Toluene	113	101	12	74/123
Chlorobenzene	95	98	3	81/127

Matrix Spikes

Lab ID 1436-28	MS	MSD	RPD(%)	Control Limits
	% Recovery			
1,1-Dichloroethene	81	78	3	57/139
Benzene	95	94	1	80/119
Trichloroethene	94	93	1	78/126
Toluene	100	93	7	74/123
Chlorobenzene	102	94	7	81/127

1436.qa

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Quality Assurance Addendum Report

Notes:

Note that Matrix Spikes are not project specific. Therefore, spike information shown on this report may not be from the same project; however, they were analyzed in the same analytical batch.

Definitions:

Spike: A sample from the analytical batch which has been spiked with the parameter(s) of interest at a known concentration and taken through the same preparation and analysis as the samples.

Spike Duplicate: A duplicate of the spiked sample, taken from a separate aliquot of the sample.

RPD: Relative Percent Difference between a Spike and a Spike Duplicate (or a sample and sample duplicate).
RPD = {(Spike-Spk. Dup.)/Mean} * 100

Where the mean is the average spike recovery of the matrix spike and the matrix spike duplicate.

Mean: The average sample results, from both samples and sample duplicates.

Control limits are calculated by SCS Analytical Laboratory for internal use from existing spike data. Control limits are found by calculating three standard deviations above and below the mean of the population.

1436.qa

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CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

1436

COMPANY NAME: SCS ENGINEERS	CARRIER:	TURNAROUND TIME REQUIRED:	
ADDRESS: LONG BEACH	SHIPMENT DATE:	[X] NORMAL	
PHONE NUMBER: 310 426-9544	SHIPPING NUMBER:	[ ] 5-DAY	[ ] 3-DAY
P.O. NUMBER:	NUMBER OF SAMPLES: 5	PAGE 1 OF 5	[ ] 24-HOUR
			[ ] IMMEDIATE ATTENTION

PROJECT NAME: ANGELES CHEMICAL

PROJECT ADDRESS: SANTA FE SPRINGS

PROJECT NUMBER: 0185016.01

SAMPLER NAME AND SIGNATURE: BRIAN WATTERSON / B.G. Watt

REPORTS TO BE SENT TO: BRIAN WATTERSON

SCS TAG	SAMPLE ID. NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	ANALYSES REQUIRED: Archive	LAB ONLY: SAMPLE CONDITION UPON RECEIPT
1436	CPT 8-1		SOIL			1-5-94					X	Cold
-1	CPT8-5		↓			↓					X	↓
-2	CPT8-10		↓			↓					X	↓
	~~CPT8-15~~		~~↓~~			~~↓~~					~~X~~	↓
3	CPT8-20		↓			↓					X	↓
-4	CPT8-29		↓			↓					X	↓

SPECIAL INSTRUCTIONS / COMMENTS:

RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)
B.G. Watt	1/7/94	Bruce Barbarini	Bruce Barbarini	1-7-94	Nancy Stahl
COMPANY: SCS ENGINEERS	TIME: 1:00 P	COMPANY: SCS ENGINEERS	COMPANY: SCS ENGINEERS	TIME: 2:00 P	COMPANY: SCS lab 1-7-94

02/91 SCS ANALYTICAL LABORATORY 2860 Walnut Avenue • Long Beach, California 90806 - (213) 595-9324

2:00pm

Processed by KOPY KAT

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1436.

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

COMPANY NAME: SCS ENGINEERS	CARRIER:	TURNAROUND TIME REQUIRED: ☑ NORMAL ☐ 5-DAY ☐ 3-DAY ☐ 24-HOUR ☐ IMMEDIATE ATTENTION	
ADDRESS: LONG BEACH	SHIPMENT DATE:		
PHONE NUMBER: 310 426-9544	SHIPPING NUMBER:		
P.O. NUMBER:	NUMBER OF SAMPLES: 10	PAGE 2 OF 5	

PROJECT NAME: ANGELES CHEMICAL

PROJECT ADDRESS: SANTA FE SPRINGS

PROJECT NUMBER: 01850016.01

SAMPLER NAME AND SIGNATURE: BRIAN WATTERSON / B.A. Watterson

REPORTS TO BE SENT TO: BRIAN WATTERSON

SCS TAG	SAMPLE I.D. NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE/TIME COLLECTED	FIELD TEMP.	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	8240	Archive									LAB ONLY: SAMPLE CONDITION UPON RECEIPT
1436-5	BH15-1		SOIL			1/5/94					X										Cool
-6	BH15-5										X										
-7	BH15-10										X	X									
-8	BH15-15											X									
-9	BH15-20										X										
-10	BH15-25											X									
-11	BH16-1					1/6/94					X										
-12	BH16-5										X										
-13	BH16-10										X										
-14	BH16-15											X									

SPECIAL INSTRUCTIONS / COMMENTS:

RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)
B.A. Watterson	1/7/94	Bruce Burbank	Bruce Burbank	1-7-94	Nancy Hotel
COMPANY: SCS ENGINEERS	TIME: 1:00 P	COMPANY: SCS ENGINEERS	COMPANY: SCS ENGINEERS	TIME: 2:00 P	COMPANY: SCS Lab 1-7-94

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CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

1-136

COMPANY NAME: SCS ENGINEERS	CARRIER:	TURNAROUND TIME REQUIRED: ☒ NORMAL ☐ 5-DAY ☐ 3-DAY ☐ 24-HOUR ☐ IMMEDIATE ATTENTION	
ADDRESS: LONG BEACH	SHIPMENT DATE:		
PHONE NUMBER: 310 426-9544	SHIPPING NUMBER:		
P.O. NUMBER:	NUMBER OF SAMPLES:	PAGE 3 OF 5	

PROJECT NAME: ANGELES CHEMICAL

PROJECT ADDRESS: SANTA FE SPRINGS

PROJECT NUMBER: 01850161.01

SAMPLER NAME AND SIGNATURE: BRIAN WATTERSON / BC Watt

REPORTS TO BE SENT TO: BRIAN WATTERSON

SCS TAG	SAMPLE I.D. NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP.	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	8240	archive									LAB ONLY: SAMPLE CONDITION UPON RECEIPT
1-136-15	BHL-20		SOIL			1/6/94					X										Good
16	BHL-25		↓			"						X									↓
17	MW4-5		SOIL			1-5-94					X										
18	MW4-10		↓			↓					X										
19	MW4-15											X									
20	MW4-20										X										
21	MW4-28		↓			↓						X									↓

SPECIAL INSTRUCTIONS / COMMENTS:

RELINQUISHED BY (Signature)	DATE	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE	RECEIVED BY (Signature)
B.C. Watt	1/7/94	Bruce Bartomi	Bruce Bartomi	1-7-94	Jimmy Hakel
COMPANY: SCS ENGINEERS	TIME: 1:00P	COMPANY: SCS ENGINEERS	COMPANY: SCS ENGINEERS	TIME: 2:00P	COMPANY: SCS lab 1-7-94

2 copies

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CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

1436

COMPANY NAME: SCS ENGINEERS	CARRIER:	TURNAROUND TIME REQUIRED: ☒ NORMAL ☐ 5-DAY ☐ 3-DAY ☐ 24-HOUR ☐ IMMEDIATE ATTENTION	
ADDRESS: LONG BEACH	SHIPMENT DATE:		
PHONE NUMBER: 310 426-9544	SHIPPING NUMBER:		
PO NUMBER:	NUMBER OF SAMPLES: 10	PAGE 4 OF 5	

PROJECT NAME: ANGELES CHEMICAL
PROJECT ADDRESS: SANTA FE SPRINGS
PROJECT NUMBER: 0185016.01
SAMPLER NAME AND SIGNATURE: B. Watterson B.G. Watterson
REPORTS TO BE SENT TO: BRIAN WATTERSON

SCS TAG	SAMPLE ID NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	8240	Archive									SAMPLE CONDITION UPON RECEIPT
1436.22	MW7-5		SOIL			1/6/94					X										Cold
.23	MW7-10					"					X										
.24	MW7-15					"						X									
.25	MW7-20					"					X										
.26	MW5-2 ~~MW7-25~~					1/5/94					X										
.27	MW5-5										X										
.28	MW5-10										X										
.29	MW5-20										X										
.30	MW5-25											X									
.31	MW5-30											X									

SPECIAL INSTRUCTIONS / COMMENTS:

RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)
B.G. Watt	1/7/94	Bonnie Antonio	Bonnie Antonio	1-7-94	Carey Fitzhugh
COMPANY: SCS ENGINEERS	TIME: 1:00 PM	COMPANY: SCS ENGINEERS	COMPANY: SCS ENGINEERS	TIME: 2:00P	COMPANY: SCS Lab 1-7-94

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

1436

COMPANY NAME: ~~Angeles Chemical~~ SCS ENGINEERS	CARRIER:	TURNAROUND TIME REQUIRED:	
ADDRESS: LONG BEACH	SHIPMENT DATE:	☒ NORMAL	
PHONE NUMBER: 310 426-9544	SHIPPING NUMBER:	☐ 5-DAY	☐ 3-DAY
P.O. NUMBER:	NUMBER OF SAMPLES: 10 PAGE 5 OF 5	☐ 24-HOUR	
		☐ IMMEDIATE ATTENTION	

PROJECT NAME: ANGELES CHEMICAL

PROJECT ADDRESS: SANTA FE SPRINGS

PROJECT NUMBER: 0185016.01

SAMPLER NAME AND SIGNATURE: B. Watterson BA Watterson

REPORTS TO BE SENT TO: B. Watterson

SCS TAC	SAMPLE I.D. NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	ANALYSES REQUIRED: EPA 8240	ANALYSES REQUIRED: ARCHIVE	LAB ONLY: SAMPLE CONDITION UPON RECEIPT
436 32	MW2-5		SOIL			1-7-94					X		
33	MW2-10		↓			↓					X		
34	MW2-15											X	
35	MW2-20										X		
36	MW2-25											X	
37	MW2-30										X		
38	MW2-35											X	
39	MW2-40										X		
40	MW2-45											X	
41	MW2-50		↓			↓						X	

SPECIAL INSTRUCTIONS / COMMENTS:

RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY (Signature)
BA Watterson	1/7/94	Bruce Anfonio	Bruce Anfonio	1-7-94	
COMPANY: SCS ENGINEERS	TIME: 1:00P	COMPANY: SCS ENGINEERS	COMPANY: SCS ENGINEERS	TIME: 2:00P	COMPANY

02/91 SCS ANALYTICAL LABORATORY 2860 Walnut Avenue • Long Beach, California 90806 - (213) 595-9324

Processed by KOPY KAT

ICS ANALYTICAL LABORATORY
2860 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90806
(310) 595-9324
FAX (310) 595-6709

MEMO

TO: Brian Watterson

January 24, 1994

JOB NO.: 0185016.01
FOLDER NO.: 1442

LABORATORY REPORT

Samples: Sixteen (16) soil samples from Angeles Chemical, Santa Fe Springs, collected on 01/07/94 and 01/10/94. Seven (7) samples to be analyzed, the remainder to be archived.

EPA 8240 - see attached sheets.

Reviewed by	Approved by

A1442.rep

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Addendum Report, EPA 8240

Sample I.D.: MW 7-30
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
67-64-1	Acetone	6,050	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	29,700	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	28	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	69	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 7-30
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	34	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	7	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 7-40
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	27	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 7-40
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 3-5
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 3-5
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 6185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	13	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	18	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	18	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 3-10
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 3-10
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 3-20
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	261	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 3-20
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 3-30
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
67-64-1	Acetone	15,100	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	3,000	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	332	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	109	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	1,340	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 3-30
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	452	5
108-88-3	Toluene	480	5
71-55-6	1,1,1-Trichloroethane	88	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	366	5
95-47-6	o-Xylene	104	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW 3-40
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	5
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
124-48-1	Chlorodibromomethane	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
74-95-3	Dibromomethane	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
110-56-5	1,4-Dichloro-2-butene	ND	5
75-71-8	Dichlorodifluoromethane	ND	5
75-34-3	1,1-Dichloroethane	23	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethylene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
64-17-5	Ethanol	ND	5
100-41-4	Ethylbenzene	ND	5
97-63-2	Ethyl Methacrylate	ND	5
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	5
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	ND	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW 3-40
Date Received: 01/10/94
Date Analyzed: 01/19/94
Matrix: Soil
Project #: 0185016.01
File #: A1442.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
100-42-5	Styrene	ND	5
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	69	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
96-18-4	1,2,3-Trichloropropane	ND	5
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Quality Assurance Addendum Report

EPA 8240

Surrogate Spikes

Lab ID	$DCAd_4$	$Told_8$	BFB
	% Recovery		
1442-0	85	103	83
1442-2	79	101	67
1442-6	81	103	68
1442-7	79	99	85
1442-9	84	103	74
1442-11	83	103	82
1442-13	81	100	72

Matrix Spikes

Lab ID 1442-2	MS	MSD	RPD(%)	Control Limits
	% Recovery			
1,1-Dichloroethene	101	87	15	57/139
Benzene	94	91	4	80/119
Trichloroethene	93	91	2	78/126
Toluene	98	95	3	74/123
Chlorobenzene	97	97	0	81/127

1442.qa

Processed by KOPY KAT

Quality Assurance Addendum Report

Notes:

Note that Matrix Spikes are not project specific. Therefore, spike information shown on this report may not be from the same project; however, they were analyzed in the same analytical batch.

Definitions:

Spike: A sample from the analytical batch which has been spiked with the parameter(s) of interest at a known concentration and taken through the same preparation and analysis as the samples.

Spike Duplicate: A duplicate of the spiked sample, taken from a separate aliquot of the sample.

RPD: Relative Percent Difference between a Spike and a Spike Duplicate (or a sample and sample duplicate).
RPD = [(Spike-Spk. Dup.)/Mean] * 100

Where the mean is the average spike recovery of the matrix spike and the matrix spike duplicate.

Mean: The average sample results, from both samples and sample duplicates.

Control limits are calculated by SCS Analytical Laboratory for internal use from existing spike data. Control limits are found by calculating three standard deviations above and below the mean of the population.

1442.qa

Processed by KOPY KAT

1442

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

COMPANY NAME: SCS ENGINEERS	CARRIER:		TURNAROUND TIME REQUIRED: ☑ NORMAL ☐ 5-DAY ☐ 3-DAY ☐ 24-HOUR ☐ IMMEDIATE ATTENTION
ADDRESS: LONG BEACH	SHIPMENT DATE:		
PHONE NUMBER:	SHIPPING NUMBER:		
P.O. NUMBER:	NUMBER OF SAMPLES:	PAGE 1 OF 2	

PROJECT NAME: Angeles Chemical

PROJECT ADDRESS: Santa Fe Springs

PROJECT NUMBER: 0185016.01

SAMPLER NAME AND SIGNATURE: Brian Watterson B.L. Watterson

REPORTS TO BE SENT TO: Brian Watterson

SCS TAC	SAMPLE ID NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE/TYPE	DATE/TIME COLLECTED	FIELD TEMP	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	ANALYSES REQUIRED: 8240	Archive	LAB ONLY: SAMPLE CONDITION UPON RECEIPT
441-0	MW7-30		SOIL		brass 2x6	1/10/94					X		Cold
-1	MW7-35		↓		↓	↓						X	↓
-2	MW7-40		↓		↓	↓					X		↓
-3	MW7-45		↓		↓	↓						X	↓
-4	MW7-50		↓		↓	↓						X	↓
5	MW7-55		↓		↓	↓						X	
6	MW3-5					1/7/94					X		
7	MW3-10					↓					X		
8	MW3-15					↓						X	
-9	MW3-20					↓					X		

SPECIAL INSTRUCTIONS / COMMENTS:

RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)
B.L. Watterson	1/10/94	Jerry [illegible]			
COMPANY	TIME	COMPANY	COMPANY	TIME	COMPANY
		SCS Lab 1-10-94			

02/91 SCS ANALYTICAL LABORATORY 2860 Walnut Avenue • Long Beach, California 90806 - (213) 595-9324

4:00pm

Processed by KOPY KAT

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CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

1442

COMPANY NAME: SCS ENG.	CARRIER:	TURNAROUND TIME REQUIRED: ☑ NORMAL ☐ 5-DAY ☐ 3-DAY ☐ 24-HOUR ☐ IMMEDIATE ATTENTION	
ADDRESS: LONG BEACH	SHIPMENT DATE:		
PHONE NUMBER:	SHIPPING NUMBER:		
P.O. NUMBER:	NUMBER OF SAMPLES:	PAGE 2 OF 2	

PROJECT NAME: Angeles Chemical

PROJECT ADDRESS: Santa Fe Springs

PROJECT NUMBER: 0185016.01

SAMPLER NAME AND SIGNATURE: Brian Watterson B.G. Watt

REPORTS TO BE SENT TO: Brian Watterson

SCS TAC	SAMPLE ID NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	ANALYSES REQUIRED: 8240	Archive									LAB ONLY: SAMPLE CONDITION UPON RECEIPT
1442-10	MW3-25		Soil		brass 2x6	1/7/94						X									Cold
.11	MW3-30		↓		↓	↓					X										↓
.12	MW3-35		↓		↓	↓						X									↓
13	MW3-40		↓		↓	↓					X										↓
.14	MW3-45		↓		↓	↓						X									↓
.15	MW3-50											X									

SPECIAL INSTRUCTIONS / COMMENTS:

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
B.G. Watt	1/10/94	Tammy Jeffel			
COMPANY	TIME	COMPANY SCS Lab 1-10-94	COMPANY	TIME	COMPANY

0693 SCS ANALYTICAL LABORATORY 2860 Walnut Avenue • Long Beach, California 90806-1834 • (310) 595-9324

4:00 pm

SCS ANALYTICAL LABORATORY

MEMO

TO: Brian Watterson

January 26, 1994

JOB NO.: 0185016.01
FOLDER NO.: 1450

LABORATORY REPORT

Samples: Twelve (12) soil samples from Angeles Chemical, collected on 01/11/94 and received on 01/12/94. Seven (7) samples to be analyzed, the remainder to be archived.

EPA 8240 - See attached sheets.

Reviewed by	Approved by

a1450.rep

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: BH17-1
Date Received: 01/12/94
Date Analyzed: 01/19/94 and 01/20/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	39,700	1,250
107-02-8	Acrolein	ND	1,250
107-13-1	Acrylonitrile	ND	1,250
71-43-2	Benzene	ND	250
75-27-4	Bromodichloromethane	ND	250
75-25-2	Bromoform	ND	250
74-83-9	Bromomethane	ND	750
78-93-3	2-Butanone	12,200	1,250
75-15-0	Carbon Disulfide	ND	250
56-23-5	Carbon Tetrachloride	ND	250
108-90-7	Chlorobenzene	ND	250
124-48-1	Chlorodibromomethane	ND	250
75-00-3	Chloroethane	ND	750
110-75-8	2-Chloroethyl Vinyl Ether	ND	1,250
67-66-3	Chloroform	ND	250
74-87-3	Chloromethane	ND	750
124-48-1	Dibromochloromethane	ND	250
74-95-3	Dibromomethane	ND	250
541-73-1	1,3-Dichlorobenzene	ND	250
106-46-7	1,4-Dichlorobenzene	ND	250
95-50-1	1,2-Dichlorobenzene	ND	250
110-56-5	1,4-Dichloro-2-butene	ND	250
75-71-8	Dichlorodifluoromethane	ND	250
75-34-3	1,1-Dichloroethane	706	250
107-06-2	1,2-Dichloroethane	ND	250
75-35-4	1,1-Dichloroethene	ND	250
156-60-5	trans-1,2-Dichloroethene	ND	250
78-87-5	1,2-Dichloropropane	ND	250
10061-01-5	cis-1,3-Dichloropropene	ND	250
10061-02-6	trans-1,3-Dichloropropene	ND	250
64-17-5	Ethanol	ND	250
100-41-4	Ethylbenzene	1,560	250
97-63-2	Ethyl Methacrylate	ND	250
591-78-6	2-Hexanone	ND	750
74-88-4	Iodomethane	ND	250
75-09-2	Methylene Chloride	ND	1,250
108-10-1	4-Methyl-2-Pentanone	2,050	750

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: BH17-1
Date Received: 01/12/94
Date Analyzed: 01/19/94 and 01/20/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	250
79-34-5	1,1,2,2-Tetrachloroethane	ND	250
127-18-4	Tetrachloroethene	41,800	250
108-88-3	Toluene	11,200	250
71-55-6	1,1,1-Trichloroethane	36,800	250
79-00-5	1,1,2-Trichloroethane	ND	250
79-01-6	Trichloroethene	9,280	250
75-69-4	Trichlorofluoromethane	ND	250
96-18-4	1,2,3-Trichloropropane	ND	250
108-05-4	Vinyl Acetate	ND	750
75-01-4	Vinyl Chloride	ND	750
1330-20-7	m- and p-Xylenes	6,460	250
95-47-6	o-Xylene	4,020	250

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: BH17-5
Date Received: 01/12/94
Date Analyzed: 01/19/94 and 01/20/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
67-64-1	Acetone	25,200	5,000
107-02-8	Acrolein	ND	5,000
107-13-1	Acrylonitrile	ND	5,000
71-43-2	Benzene	ND	1,000
75-27-4	Bromodichloromethane	ND	1,000
75-25-2	Bromoform	ND	1,000
74-83-9	Bromomethane	ND	3,000
78-93-3	2-Butanone	35,200	1,250
75-15-0	Carbon Disulfide	ND	1,000
56-23-5	Carbon Tetrachloride	ND	1,000
108-90-7	Chlorobenzene	ND	1,000
124-48-1	Chlorodibromomethane	ND	1,000
75-00-3	Chloroethane	ND	3,000
110-75-8	2-Chloroethyl Vinyl Ether	ND	5,000
67-66-3	Chloroform	ND	1,000
74-87-3	Chloromethane	ND	3,000
124-48-1	Dibromochloromethane	ND	1,000
74-95-3	Dibromomethane	ND	1,000
541-73-1	1,3-Dichlorobenzene	ND	1,000
106-46-7	1,4-Dichlorobenzene	ND	1,000
95-50-1	1,2-Dichlorobenzene	ND	1,000
110-56-5	1,4-Dichloro-2-butene	ND	1,000
75-71-8	Dichlorodifluoromethane	ND	1,000
75-34-3	1,1-Dichloroethane	ND	1,000
107-06-2	1,2-Dichloroethane	ND	1,000
75-35-4	1,1-Dichloroethene	ND	1,000
156-60-5	trans-1,2-Dichloroethene	ND	1,000
78-87-5	1,2-Dichloropropane	ND	1,000
10061-01-5	cis-1,3-Dichloropropene	ND	1,000
10061-02-6	trans-1,3-Dichloropropene	ND	1,000
64-17-5	Ethanol	ND	1,000
100-41-4	Ethylbenzene	6,330	1,000
97-63-2	Ethyl Methacrylate	ND	1,000
591-78-6	2-Hexanone	ND	3,000
74-88-4	Iodomethane	ND	1,000
75-09-2	Methylene Chloride	ND	5,000
108-10-1	4-Methyl-2-Pentanone	11,600	3,000

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: BH17-5
Date Received: 01/12/94
Date Analyzed: 01/19/94 and 01/20/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result	R.L.
		µg/kg(ppb)	
100-42-5	Styrene	ND	1,000
79-34-5	1,1,2,2-Tetrachloroethane	ND	1,000
127-18-4	Tetrachloroethene	58,200	1,000
108-88-3	Toluene	48,300	1,000
71-55-6	1,1,1-Trichloroethane	19,400	1,000
79-00-5	1,1,2-Trichloroethane	ND	1,000
79-01-6	Trichloroethene	5,630	1,000
75-69-4	Trichlorofluoromethane	ND	1,000
96-18-4	1,2,3-Trichloropropane	ND	1,000
108-05-4	Vinyl Acetate	ND	3,000
75-01-4	Vinyl Chloride	ND	3,000
1330-20-7	m- and p-Xylenes	22,900	1,000
95-47-6	o-Xylene	4,870	1,000

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: BH17-10
Date Received: 01/12/94
Date Analyzed: 01/19/94 and 01/20/94
Matrix: Soil
Project #: 01B5016.01
File #: a1450.rep

CAS #	Compound	Result µg/kg (ppb)	R.L. µg/kg (ppb)
67-64-1	Acetone	15,400	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	60,300	50
75-15-0	Carbon Disulfide	ND	10
56-23-5	Carbon Tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	10
74-95-3	Dibromomethane	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
110-56-5	1,4-Dichloro-2-butene	ND	10
75-71-8	Dichlorodifluoromethane	ND	10
75-34-3	1,1-Dichloroethane	11	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
156-60-5	trans-1,2-Dichloroethene	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
64-17-5	Ethanol	ND	10
100-41-4	Ethylbenzene	ND	10
97-63-2	Ethyl Methacrylate	ND	10
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	10
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	3,020	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: BH17-10
Date Received: 01/12/94
Date Analyzed: 01/19/94 and 01/20/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	12	10
108-88-3	Toluene	179	10
71-55-6	1,1,1-Trichloroethane	55	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	21	10
75-69-4	Trichlorofluoromethane	ND	10
96-18-4	1,2,3-Trichloropropane	ND	10
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	24	10
95-47-6	o-Xylene	ND	10

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: BH17-20
Date Received: 01/12/94
Date Analyzed: 01/19/94, 01/20/94 and 01/21/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	1,050	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	2,400	50
75-15-0	Carbon Disulfide	ND	10
56-23-5	Carbon Tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	10
74-95-3	Dibromomethane	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
110-56-5	1,4-Dichloro-2-butene	ND	10
75-71-8	Dichlorodifluoromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
156-60-5	trans-1,2-Dichloroethene	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
64-17-5	Ethanol	ND	10
100-41-4	Ethylbenzene	ND	10
97-63-2	Ethyl Methacrylate	ND	10
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	10
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	399	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: BH17-20
Date Received: 01/12/94
Date Analyzed: 01/19/94, 01/20/94 and 01/21/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-69-4	Trichlorofluoromethane	ND	10
96-18-4	1,2,3-Trichloropropane	ND	10
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	10
95-47-6	o-Xylene	ND	10

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW6-5
Date Received: 01/12/94
Date Analyzed: 01/19/94 and 01/20/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	5,180	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	17	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	3,110	50
75-15-0	Carbon Disulfide	ND	10
56-23-5	Carbon Tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	10
74-95-3	Dibromomethane	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
110-56-5	1,4-Dichloro-2-butene	ND	10
75-71-8	Dichlorodifluoromethane	ND	10
75-34-3	1,1-Dichloroethane	301	10
107-06-2	1,2-Dichloroethane	10	10
75-35-4	1,1-Dichloroethene	20	10
156-60-5	trans-1,2-Dichloroethene	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
64-17-5	Ethanol	ND	10
100-41-4	Ethylbenzene	32	10
97-63-2	Ethyl Methacrylate	ND	10
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	10
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	900	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW6-5
Date Received: 01/12/94
Date Analyzed: 01/19/94 and 01/20/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	24	10
108-88-3	Toluene	424	10
71-55-6	1,1,1-Trichloroethane	412	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	11	10
75-69-4	Trichlorofluoromethane	ND	10
96-18-4	1,2,3-Trichloropropane	ND	10
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	188	10
95-47-6	o-Xylene	89	10

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW6-10
Date Received: 01/12/94
Date Analyzed: 01/19/94 and 01/20/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result µg/kg (ppb)	R.L. µg/kg (ppb)
67-64-1	Acetone	2,030	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	804	50
75-15-0	Carbon Disulfide	ND	10
56-23-5	Carbon Tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	10
74-95-3	Dibromomethane	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
110-56-5	1,4-Dichloro-2-butene	ND	10
75-71-8	Dichlorodifluoromethane	ND	10
75-34-3	1,1-Dichloroethane	78	10
107-06-2	1,2-Dichloroethane	18	10
75-35-4	1,1-Dichloroethene	ND	10
156-60-5	trans-1,2-Dichloroethene	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
64-17-5	Ethanol	ND	10
100-41-4	Ethylbenzene	ND	10
97-63-2	Ethyl Methacrylate	ND	10
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	10
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	1,230	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: ~~BH17~~ MW6-10
Date Received: 01/12/94
Date Analyzed: 01/19/94 and 01/20/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	36	10
71-55-6	1,1,1-Trichloroethane	312	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-69-4	Trichlorofluoromethane	ND	10
96-18-4	1,2,3-Trichloropropane	ND	10
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	ND	10
95-47-6	o-Xylene	ND	10

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW6-20
Date Received: 01/12/94
Date Analyzed: 01/19/94 and 01/20/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
67-64-1	Acetone	ND	50
107-02-8	Acrolein	ND	50
107-13-1	Acrylonitrile	ND	50
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	30
78-93-3	2-Butanone	ND	50
75-15-0	Carbon Disulfide	ND	10
56-23-5	Carbon Tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	10
74-95-3	Dibromomethane	ND	10
541-73-1	1,3-Dichlorobenzene	ND	10
106-46-7	1,4-Dichlorobenzene	ND	10
95-50-1	1,2-Dichlorobenzene	ND	10
110-56-5	1,4-Dichloro-2-butene	ND	10
75-71-8	Dichlorodifluoromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	27	10
156-60-5	trans-1,2-Dichloroethene	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
64-17-5	Ethanol	ND	10
100-41-4	Ethylbenzene	3,220	10
97-63-2	Ethyl Methacrylate	ND	10
591-78-6	2-Hexanone	ND	30
74-88-4	Iodomethane	ND	10
75-09-2	Methylene Chloride	ND	50
108-10-1	4-Methyl-2-Pentanone	2,440	30

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW6-20
Date Received: 01/12/94
Date Analyzed: 01/19/94 and 01/20/94
Matrix: Soil
Project #: 0185016.01
File #: a1450.rep

CAS #	Compound	Result	R.L.
		µg/kg (ppb)	
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	3,510	10
108-88-3	Toluene	4,300	10
71-55-6	1,1,1-Trichloroethane	2,970	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	154	10
75-69-4	Trichlorofluoromethane	ND	10
96-18-4	1,2,3-Trichloropropane	ND	10
108-05-4	Vinyl Acetate	ND	30
75-01-4	Vinyl Chloride	ND	30
1330-20-7	m- and p-Xylenes	6,240	10
95-47-6	o-Xylene	4,000	10

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Quality Assurance Addendum Report

EPA 8240

Surrogate Spikes

Lab ID	$DCAd_4$	$Told_8$	BFB
	% Recovery		
1450-0	81	100	94
1450-1	87	106	89
1450-2	82	103	83
1450-4	81	99	81
1450-6	84	105	89
1450-7	86	97	81
1450-9	81	111	112

Matrix Spikes

Lab ID 1442-2	MS	MSD	RPD(%)	Control Limits
	% Recovery			
1,1-Dichloroethene	101	87	15	57/139
Benzene	94	91	4	80/119
Trichloroethene	93	91	2	78/126
Toluene	98	95	3	74/123
Chlorobenzene	97	97	0	81/127

Processed by KOPY KAT

Quality Assurance Addendum Report

Notes:

Note that Matrix Spikes are not project specific. Therefore, spike information shown on this report may not be from the same project; however, they were analyzed in the same analytical batch.

Definitions:

Spike: A sample from the analytical batch which has been spiked with the parameter(s) of interest at a known concentration and taken through the same preparation and analysis as the samples.

Spike Duplicate: A duplicate of the spiked sample, taken from a separate aliquot of the sample.

RPD: Relative Percent Difference between a Spike and a Spike Duplicate (or a sample and sample duplicate).
RPD = [(Spike-Spk. Dup.)/Mean] * 100

Where the mean is the average spike recovery of the matrix spike and the matrix spike duplicate.

Mean: The average sample results, from both samples and sample duplicates.

Control limits are calculated by SCS Analytical Laboratory for internal use from existing spike data. Control limits are found by calculating three standard deviations above and below the mean of the population.

1450.qa

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1450

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

COMPANY NAME: SCS
ADDRESS:
PHONE NUMBER:
P.O. NUMBER: 0185016.01
PROJECT NAME: Angeles Chemical
PROJECT ADDRESS: Santa Fe Springs
PROJECT NUMBER:
SAMPLER NAME AND SIGNATURE: Brian Watterson B.C. Watt
REPORTS TO BE SENT TO: Brian Watterson

CARRIER:
SHIPMENT DATE:
SHIPPING NUMBER:
NUMBER OF SAMPLES:
PAGE 1 OF 2

TURNAROUND TIME REQUIRED:
- [x] NORMAL
- [ ] 5-DAY
- [ ] 3-DAY
- [ ] 24-HOUR
- [ ] IMMEDIATE ATTENTION

SCS TRG

	SAMPLE ID NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	8240	Archive	LAB ONLY: SAMPLE CONDITION UPON RECEIPT
1450-0	BH17-1		Soil		Brass 2½x4	1/11/94					X		Cold
-1	BH17-5										X		
-2	BH17-10										X		
-3	BH17-15											X	
-4	BH17-20										X		
-5	BH17-25											X	
-6	MW6-5										X		
-7	MW6-10										X		
-8	MW6-15											X	
-9	MW6-20										X		

SPECIAL INSTRUCTIONS / COMMENTS:

RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE	RECEIVED BY (Signature)
B.C. Watt	1/12/94	Randy Hofel			
COMPANY	TIME	COMPANY: SCS Lab 1-12-94	COMPANY	TIME	COMPANY

11.15am

1450

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

COMPANY NAME: SCS	CARRIER:		TURNAROUND TIME REQUIRED: ☑ NORMAL ☐ 5-DAY ☐ 3-DAY ☐ 24 HOUR ☐ IMMEDIATE ATTENTION
ADDRESS:	SHIPMENT DATE:		
PHONE NUMBER:	SHIPPING NUMBER:		
P.O. NUMBER:	NUMBER OF SAMPLES:	PAGE 2 OF 2	

PROJECT NAME: Angeles Chemical
PROJECT ADDRESS: Santa Fe Springs
PROJECT NUMBER: 01850/6.01
SAMPLER NAME AND SIGNATURE: Brian Watterson B.G. Watt
REPORTS TO BE SENT TO: BRIAN WATTERSON

SCS TAG

SAMPLE I.D. NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE / TYPE	DATE / TIME COLLECTED	FIELD TEMP.	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA - SOP & QAM REF	ANALYSES REQUIRED: 8240	Archive	LAB ONLY: SAMPLE CONDITION UPON RECEIPT
1450-10 MW6-25		SOIL		brass 2½x4"	1/11/94						X	Cold
-11 MW6-30		"			"						X	"

SPECIAL INSTRUCTIONS / COMMENTS:

RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)	RELINQUISHED BY (Signature)	DATE	RECEIVED BY (Signature)
B.G. Watt	1/12/94	Nancy Stahl			
COMPANY:	TIME	COMPANY: SCS Lab 1.12.94	COMPANY	TIME	COMPANY

08/93 SCS ANALYTICAL LABORATORY 2860 Walnut Avenue • Long Beach, California 90806-1834 • (310) 595-9324

11.15am

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Processed by KOPY KAT

Appendix B2: Laboratory Reports - Water, February 1994 RI

Processed by KOPY KAT

SCS ANALYTICAL LABORATORY
2860 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90806
(310) 595-9324
FAX (310) 595-6709

MEMO

TO: Brian Watterson

February 11, 1994

JOB NO.: 0185016.01
FOLDER NO.: 1503

REVISED	LABORATORY REPORT	3/28/94

Samples: Twenty nine (29) water samples, one (1) free product sample and one (1) tripblank from Angeles Chemical, Santa Fe Springs, collected on 2/03/94 and received on 2/04/94. Twenty two (22) samples to be analyzed, the remainder to be archived.

Miscellaneous analysis and EPA 624 - see attached sheets.

Reviewed by	Approved by

A1503.rep

Processed by KOPY KAT

JOB NO.: 0185016.01

LABORATORY REPORT

Sample ID	TDS (160.1) mg/L	Specific Conductivity (120.1) umhos/cm	Chloride (300.0) mg/L	SO_4^{2-} (300.0)
MW-2	2,040	1,760	222	140
MW-3	1,520	1,860	247	489
MW-4	1,480	1,730	154	321
MW-6	4,440	5,390	1,270	681
MW-6D	5,240	5,300	1,120	536
MW-7	3,000	2,170	185	156
Reporting Limit	5	10	0.3	1.5
Date Analyzed	2/07/94	2/04/94	2/09/94	2/09/94

A1503.rep

Processed by KOPY KAT

JOB NO.: 0185016.01

LABORATORY REPORT

Sample ID	Alkalinity (310.1)	HCO_3 (310.1)	CO_3 (310.1)	NO_3 (300.0)
	mg/L $CaCO_3$			mg/L
MW-2	540	540	ND	ND
MW-3	315	315	ND	ND
MW-4	500	500	ND	ND
MW-6	565	565	ND	ND
MW-6D	455	455	ND	ND
MW-7	980	980	ND	ND
Reporting Limit	10	10	10	0.2
Date Analyzed	2/08/94	2/08/94	2/08/94	2/09/94

Sample ID	pH (150.1)	Hardness (SM 314A)	MBAS* (425.1)
		mg eq $CaCO_3$/L	mg/L
MW-2	6.55	849	0.30
MW-3	7.28	925	0.30
MW-4	6.54	698	ND
MW-6	5.65	3,060	0.24
MW-6D	5.60	4,180	0.08
MW-7	6.37	2,100	ND
Reporting Limit	----	7.5	0.05
Date Analyzed	2/04/94	2/09/94	2/04/94

Sample ID	8015M/5030
	mg/L
MW-1	38,500 (G)
Reporting Limit	250
Date Analyzed	2/07/94

(G) = Gasoline
ND = Not Detected

*analysis performed at Weck Laboratories

A1503.rep

Processed by KOPY KAT

Addendum Report, Metals

Sample I.D.: MW-2
Date Received: 02/04/94
Date Analyzed: 02/07/94 and 02/09/94
Matrix: Water
Project: 0185016.01
File #: A1503.rep

Compound	EPA Number	Result mg/L (ppm)	R.L.
Calcium	200.7	244	0.05
Copper	200.7	0.10	0.05
Iron	200.7	13.7	0.05
Magnesium	200.7	58.1	0.05
Manganese	200.7	6.24	0.05
Potassium	200.7	9.84	0.05
Sodium	200.7	125	0.1
Zinc	200.7	0.14	0.05

ND = Not Detected
R.L. = Detection Limit

Note: Metal digestates will be kept 45 days from the report date unless otherwise notified by the client.

Processed by KOPY KAT

Addendum Report, Metals

Sample I.D.: MW-3
Date Received: 02/04/94
Date Analyzed: 02/07/94 and 02/09/94
Matrix: Water
Project: 0185016.01
File #: A1503.rep

Compound	EPA Number	Result mg/L (ppm)	R.L.
Calcium	200.7	223	0.05
Copper	200.7	ND	0.05
Iron	200.7	4.91	0.05
Magnesium	200.7	89.4	0.05
Manganese	200.7	3.64	0.05
Potassium	200.7	8.99	0.05
Sodium	200.7	122	0.1
Zinc	200.7	0.06	0.05

ND = Not Detected
R.L. = Detection Limit

Note: Metal digestates will be kept 45 days from the report date unless otherwise notified by the client.

Processed by KOPY KAT

Addendum Report, Metals

Sample I.D.: MW-4
Date Received: 02/04/94
Date Analyzed: 02/07/94 and 02/09/94
Matrix: Water
Project: 0185016.01
File #: A1503.rep

Compound	EPA Number	Result mg/L (ppm)	R.L.
Calcium	200.7	264	0.05
Copper	200.7	ND	0.05
Iron	200.7	7.93	0.05
Magnesium	200.7	36.9	0.05
Manganese	200.7	7.30	0.05
Potassium	200.7	9.34	0.05
Sodium	200.7	194	0.1
Zinc	200.7	0.05	0.05

ND = Not Detected
R.L. = Detection Limit

Note: Metal digestates will be kept 45 days from the report date unless otherwise notified by the client.

Processed by KOPY KAT

Addendum Report, Metals

Sample I.D.: MW-6
Date Received: 02/04/94
Date Analyzed: 02/07/94 and 02/09/94
Matrix: Water
Project: 0185016.01
File #: A1503.rep

Compound	EPA Number	Result	R.L.
		mg/L (ppm)	
Calcium	200.7	931	0.05
Copper	200.7	ND	0.05
Iron	200.7	86.2	0.05
Magnesium	200.7	177	0.05
Manganese	200.7	73.5	0.05
Potassium	200.7	16.4	0.05
Sodium	200.7	315	0.1
Zinc	200.7	0.08	0.05

ND = Not Detected
R.L. = Detection Limit

Note: Metal digestates will be kept 45 days from the report date unless otherwise notified by the client.

Processed by KOPY KAT

Addendum Report, Metals

Sample I.D.: MW-6D
Date Received: 02/04/94
Date Analyzed: 02/07/94 and 02/09/94
Matrix: Water
Project: 0185016.01
File #: A1503.rep

Compound	EPA Number	Result mg/L (ppm)	R.L.
Calcium	200.7	962	0.05
Copper	200.7	ND	0.05
Iron	200.7	87.5	0.05
Magnesium	200.7	189	0.05
Manganese	200.7	77.7	0.05
Potassium	200.7	16.8	0.05
Sodium	200.7	340	0.1
Zinc	200.7	0.06	0.05

ND = Not Detected
R.L. = Detection Limit

Note: Metal digestates will be kept 45 days from the report date unless otherwise notified by the client.

Processed by KOPY KAT

Addendum Report, Metals

Sample I.D.: MW-7
Date Received: 02/04/94
Date Analyzed: 02/07/94 and 02/09/94
Matrix: Water
Project: 0185016.01
File #: A1503.rep

Compound	EPA Number	Result mg/L (ppm)	R.L.
Calcium	200.7	413	0.05
Copper	200.7	0.39	0.05
Iron*	200.7	33.9	0.5
Magnesium*	200.7	128	5.0
Manganese	200.7	10.3	0.05
Potassium	200.7	84.1	0.05
Sodium	200.7	201	0.1
Zinc	200.7	1.07	0.05

ND = Not Detected
R.L. = Detection Limit

*Re-analyzed 3/28/94 on filtered sample.

Note: Metal digestates will be kept 45 days from the report date unless otherwise notified by the client.

Processed by KOPY KAT

Addendum Report, EPA 624

Sample I.D.: MW-1
Date Received: 02/04/94
Date Analyzed: 02/04/94 and 02/08/94
Matrix: Water
Project #: 0185016.01
File #: A1503.rep

CAS #	Compound	Result	R.L.
		µg/L(ppb)	
71-43-2	Benzene	194	100
75-27-4	Bromodichloromethane	ND	100
75-25-2	Bromoform	ND	100
74-83-9	Bromomethane	ND	600
56-23-5	Carbon Tetrachloride	ND	100
108-90-7	Chlorobenzene	ND	100
75-00-3	Chloroethane	ND	600
110-75-8	2-Chloroethyl Vinyl Ether	ND	1,000
67-66-3	Chloroform	ND	100
74-87-3	Chloromethane	ND	600
124-48-1	Dibromochloromethane	ND	100
95-50-1	1,2-Dichlorobenzene	ND	100
541-73-1	1,3-Dichlorobenzene	ND	100
106-46-7	1,4-Dichlorobenzene	ND	100
75-34-3	1,1-Dichloroethane	649	100
107-06-2	1,2-Dichloroethane	ND	100
75-35-4	1,1-Dichloroethene	2,210	100
156-60-5	trans-1,2-Dichloroethene	ND	100
78-87-5	1,2-Dichloropropane	ND	100
10061-01-5	cis-1,3-Dichloropropene	ND	100
10061-02-6	trans-1,3-Dichloropropene	ND	100
100-41-4	Ethylbenzene	333	100
75-09-2	Methylene Chloride	1,220	1,000
79-34-5	1,1,2,2-Tetrachloroethane	ND	100
127-18-4	Tetrachloroethene	662	100
108-88-3	Toluene	560	100
71-55-6	1,1,1-Trichloroethane	9,370	100
79-00-5	1,1,2-Trichloroethane	ND	100
79-01-6	Trichloroethene	7,160	100
75-69-4	Trichlorofluoromethane	ND	100
75-01-4	Vinyl Chloride	ND	20
1330-20-7	m- and p-Xylenes	1,220	100
95-47-6	o-Xylene	972	100

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 624

Sample I.D.: MW-2
Date Received: 02/04/94
Date Analyzed: 02/04/94 and 02/08/94
Matrix: Water
Project #: 0185016.01
File #: A1503.rep

CAS #	Compound	Result	R.L.
		µg/L(ppb)	
71-43-2	Benzene	ND	100
75-27-4	Bromodichloromethane	ND	100
75-25-2	Bromoform	ND	100
74-83-9	Bromomethane	ND	600
56-23-5	Carbon Tetrachloride	ND	100
108-90-7	Chlorobenzene	ND	100
75-00-3	Chloroethane	ND	600
110-75-8	2-Chloroethyl Vinyl Ether	ND	1,000
67-66-3	Chloroform	ND	100
74-87-3	Chloromethane	ND	600
124-48-1	Dibromochloromethane	ND	100
95-50-1	1,2-Dichlorobenzene	ND	100
541-73-1	1,3-Dichlorobenzene	ND	100
106-46-7	1,4-Dichlorobenzene	ND	100
75-34-3	1,1-Dichloroethane	1,130	100
107-06-2	1,2-Dichloroethane	ND	100
75-35-4	1,1-Dichloroethene	2,460	100
156-60-5	trans-1,2-Dichloroethene	ND	100
78-87-5	1,2-Dichloropropane	ND	100
10061-01-5	cis-1,3-Dichloropropene	ND	100
10061-02-6	trans-1,3-Dichloropropene	ND	100
100-41-4	Ethylbenzene	1,720	100
75-09-2	Methylene Chloride	2,980	1,000
79-34-5	1,1,2,2-Tetrachloroethane	ND	100
127-18-4	Tetrachloroethene	2,150	100
108-88-3	Toluene	7,390	100
71-55-6	1,1,1-Trichloroethane	3,470	100
79-00-5	1,1,2-Trichloroethane	ND	100
79-01-6	Trichloroethene	3,040	100
75-69-4	Trichlorofluoromethane	ND	100
75-01-4	Vinyl Chloride	ND	20
1330-20-7	m- and p-Xylenes	5,690	100
95-47-6	o-Xylene	2,100	100

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 624

Sample I.D.: MW-3
Date Received: 02/04/94
Date Analyzed: 02/04/94 and 02/08/94
Matrix: Water
Project #: 0185016.01
File #: A1503.rep

CAS #	Compound	Result	R.L.
		µg/L(ppb)	
71-43-2	Benzene	63	50
75-27-4	Bromodichloromethane	ND	50
75-25-2	Bromoform	ND	50
74-83-9	Bromomethane	ND	300
56-23-5	Carbon Tetrachloride	ND	50
108-90-7	Chlorobenzene	ND	50
75-00-3	Chloroethane	ND	300
110-75-8	2-Chloroethyl Vinyl Ether	ND	500
67-66-3	Chloroform	ND	50
74-87-3	Chloromethane	ND	300
124-48-1	Dibromochloromethane	ND	50
95-50-1	1,2-Dichlorobenzene	ND	50
541-73-1	1,3-Dichlorobenzene	ND	50
106-46-7	1,4-Dichlorobenzene	ND	50
75-34-3	1,1-Dichloroethane	85	50
107-06-2	1,2-Dichloroethane	ND	50
75-35-4	1,1-Dichloroethene	2,800	50
156-60-5	trans-1,2-Dichloroethene	ND	50
78-87-5	1,2-Dichloropropane	ND	50
10061-01-5	cis-1,3-Dichloropropene	ND	50
10061-02-6	trans-1,3-Dichloropropene	ND	50
100-41-4	Ethylbenzene	115	50
75-09-2	Methylene Chloride	6,530	500
79-34-5	1,1,2,2-Tetrachloroethane	ND	50
127-18-4	Tetrachloroethene	5,370	50
108-88-3	Toluene	579	50
71-55-6	1,1,1-Trichloroethane	444	50
79-00-5	1,1,2-Trichloroethane	ND	50
79-01-6	Trichloroethene	1,730	50
75-69-4	Trichlorofluoromethane	ND	50
75-01-4	Vinyl Chloride	ND	10
1330-20-7	m- and p-Xylenes	571	50
95-47-6	o-Xylene	443	50

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 624

Sample I.D.: MW-4
Date Received: 02/04/94
Date Analyzed: 02/04/94 and 02/08/94
Matrix: Water
Project #: 0185016.01
File #: A1503.rep

CAS #	Compound	Result	R.L.
		µg/L(ppb)	
71-43-2	Benzene	111	100
75-27-4	Bromodichloromethane	ND	100
75-25-2	Bromoform	ND	100
74-83-9	Bromomethane	ND	600
56-23-5	Carbon Tetrachloride	ND	100
108-90-7	Chlorobenzene	ND	100
75-00-3	Chloroethane	ND	600
110-75-8	2-Chloroethyl Vinyl Ether	ND	1,000
67-66-3	Chloroform	ND	100
74-87-3	Chloromethane	ND	600
124-48-1	Dibromochloromethane	ND	100
95-50-1	1,2-Dichlorobenzene	ND	100
541-73-1	1,3-Dichlorobenzene	ND	100
106-46-7	1,4-Dichlorobenzene	ND	100
75-34-3	1,1-Dichloroethane	1,410	100
107-06-2	1,2-Dichloroethane	ND	100
75-35-4	1,1-Dichloroethene	806	100
156-60-5	trans-1,2-Dichloroethene	ND	100
78-87-5	1,2-Dichloropropane	ND	100
10061-01-5	cis-1,3-Dichloropropene	ND	100
10061-02-6	trans-1,3-Dichloropropene	ND	100
100-41-4	Ethylbenzene	1,180	100
75-09-2	Methylene Chloride	4,760	1,000
79-34-5	1,1,2,2-Tetrachloroethane	ND	100
127-18-4	Tetrachloroethene	3,320	100
108-88-3	Toluene	12,700	100
71-55-6	1,1,1-Trichloroethane	36,200	100
79-00-5	1,1,2-Trichloroethane	ND	100
79-01-6	Trichloroethene	14,300	100
75-69-4	Trichlorofluoromethane	ND	100
75-01-4	Vinyl Chloride	ND	20
1330-20-7	m- and p-Xylenes	3,410	100
95-47-6	o-Xylene	952	100

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 624

Sample I.D.: MW-6
Date Received: 02/04/94
Date Analyzed: 02/04/94 and 02/08/94
Matrix: Water
Project #: 0185016.01
File #: A1503.rep

CAS #	Compound	Result µg/L(ppb)	R.L.
71-43-2	Benzene	795	50
75-27-4	Bromodichloromethane	ND	50
75-25-2	Bromoform	ND	50
74-83-9	Bromomethane	ND	300
56-23-5	Carbon Tetrachloride	ND	50
108-90-7	Chlorobenzene	ND	50
75-00-3	Chloroethane	ND	300
110-75-8	2-Chloroethyl Vinyl Ether	ND	500
67-66-3	Chloroform	ND	50
74-87-3	Chloromethane	ND	300
124-48-1	Dibromochloromethane	ND	50
95-50-1	1,2-Dichlorobenzene	ND	50
541-73-1	1,3-Dichlorobenzene	ND	50
106-46-7	1,4-Dichlorobenzene	ND	50
75-34-3	1,1-Dichloroethane	2,260	50
107-06-2	1,2-Dichloroethane	1,140	50
75-35-4	1,1-Dichloroethene	1,240	50
156-60-5	trans-1,2-Dichloroethene	ND	50
78-87-5	1,2-Dichloropropane	ND	50
10061-01-5	cis-1,3-Dichloropropene	ND	50
10061-02-6	trans-1,3-Dichloropropene	ND	50
100-41-4	Ethylbenzene	1,910	50
75-09-2	Methylene Chloride	21,400	500
79-34-5	1,1,2,2-Tetrachloroethane	ND	50
127-18-4	Tetrachloroethene	2,130	50
108-88-3	Toluene	15,300	50
71-55-6	1,1,1-Trichloroethane	114,000	50
79-00-5	1,1,2-Trichloroethane	ND	50
79-01-6	Trichloroethene	1,320	50
75-69-4	Trichlorofluoromethane	ND	50
75-01-4	Vinyl Chloride	ND	10
1330-20-7	m- and p-Xylenes	2,900	50
95-47-6	o-Xylene	1,810	50

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 624

Sample I.D.: MW-6D
Date Received: 02/04/94
Date Analyzed: 02/04/94 and 02/08/94
Matrix: Water
Project #: 0185016.01
File #: A1503.rep

CAS #	Compound	Result µg/L(ppb)	R.L.
71-43-2	Benzene	848	100
75-27-4	Bromodichloromethane	ND	100
75-25-2	Bromoform	ND	100
74-83-9	Bromomethane	ND	600
56-23-5	Carbon Tetrachloride	ND	100
108-90-7	Chlorobenzene	ND	100
75-00-3	Chloroethane	ND	600
110-75-8	2-Chloroethyl Vinyl Ether	ND	1,000
67-66-3	Chloroform	ND	100
74-87-3	Chloromethane	ND	600
124-48-1	Dibromochloromethane	ND	100
95-50-1	1,2-Dichlorobenzene	ND	100
541-73-1	1,3-Dichlorobenzene	ND	100
106-46-7	1,4-Dichlorobenzene	ND	100
75-34-3	1,1-Dichloroethane	2,570	100
107-06-2	1,2-Dichloroethane	1,240	100
75-35-4	1,1-Dichloroethene	1,920	100
156-60-5	trans-1,2-Dichloroethene	ND	100
78-87-5	1,2-Dichloropropane	ND	100
10061-01-5	cis-1,3-Dichloropropene	ND	100
10061-02-6	trans-1,3-Dichloropropene	ND	100
100-41-4	Ethylbenzene	2,080	100
75-09-2	Methylene Chloride	20,000	1,000
79-34-5	1,1,2,2-Tetrachloroethane	ND	100
127-18-4	Tetrachloroethene	2,410	100
108-88-3	Toluene	13,500	100
71-55-6	1,1,1-Trichloroethane	118,000	100
79-00-5	1,1,2-Trichloroethane	ND	100
79-01-6	Trichloroethene	1,450	100
75-69-4	Trichlorofluoromethane	ND	100
75-01-4	Vinyl Chloride	ND	20
1330-20-7	m- and p-Xylenes	3,320	100
95-47-6	o-Xylene	2,100	100

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 624

Sample I.D.: MW-7
Date Received: 02/04/94
Date Analyzed: 02/04/94 and 02/08/94
Matrix: Water
Project #: 0185016.01
File #: A1503.rep

CAS #	Compound	Result	R.L.
		µg/L(ppb)	
71-43-2	Benzene	46	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
75-34-3	1,1-Dichloroethane	2,130	5
107-06-2	1,2-Dichloroethane	31	5
75-35-4	1,1-Dichloroethene	151	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
100-41-4	Ethylbenzene	45	5
75-09-2	Methylene Chloride	ND	50
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	134	5
108-88-3	Toluene	398	5
71-55-6	1,1,1-Trichloroethane	90	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	45	5
75-69-4	Trichlorofluoromethane	ND	5
75-01-4	Vinyl Chloride	ND	1
1330-20-7	m- and p-Xylenes	133	5
95-47-6	o-Xylene	53	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 624

Sample I.D.: Rinsate
Date Received: 02/04/94
Date Analyzed: 02/04/94 and 02/08/94
Matrix: Water
Project #: 0185016.01
File #: A1503.rep

CAS #	Compound	Result	R.L.
		µg/L(ppb)	
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
100-41-4	Ethylbenzene	ND	5
75-09-2	Methylene Chloride	ND	50
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
75-01-4	Vinyl Chloride	ND	1
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Addendum Report, EPA 624

Sample I.D.: Tripblank
Date Received: 02/04/94
Date Analyzed: 02/04/94 and 02/08/94
Matrix: Water
Project #: 0185016.01
File #: A1503.rep

CAS #	Compound	Result	R.L.
		µg/L(ppb)	
71-43-2	Benzene	ND	5
75-27-4	Bromodichloromethane	ND	5
75-25-2	Bromoform	ND	5
74-83-9	Bromomethane	ND	30
56-23-5	Carbon Tetrachloride	ND	5
108-90-7	Chlorobenzene	ND	5
75-00-3	Chloroethane	ND	30
110-75-8	2-Chloroethyl Vinyl Ether	ND	50
67-66-3	Chloroform	ND	5
74-87-3	Chloromethane	ND	30
124-48-1	Dibromochloromethane	ND	5
95-50-1	1,2-Dichlorobenzene	ND	5
541-73-1	1,3-Dichlorobenzene	ND	5
106-46-7	1,4-Dichlorobenzene	ND	5
75-34-3	1,1-Dichloroethane	ND	5
107-06-2	1,2-Dichloroethane	ND	5
75-35-4	1,1-Dichloroethene	ND	5
156-60-5	trans-1,2-Dichloroethene	ND	5
78-87-5	1,2-Dichloropropane	ND	5
10061-01-5	cis-1,3-Dichloropropene	ND	5
10061-02-6	trans-1,3-Dichloropropene	ND	5
100-41-4	Ethylbenzene	ND	5
75-09-2	Methylene Chloride	ND	50
79-34-5	1,1,2,2-Tetrachloroethane	ND	5
127-18-4	Tetrachloroethene	ND	5
108-88-3	Toluene	ND	5
71-55-6	1,1,1-Trichloroethane	ND	5
79-00-5	1,1,2-Trichloroethane	ND	5
79-01-6	Trichloroethene	ND	5
75-69-4	Trichlorofluoromethane	ND	5
75-01-4	Vinyl Chloride	ND	1
1330-20-7	m- and p-Xylenes	ND	5
95-47-6	o-Xylene	ND	5

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Quality Assurance Addendum Report

LAB ID	SYMBOL	TEST	% Recovery MS	MSD	RPD(%)
LCS	Cl^-	Chloride	93.2	97.5	2.3
1503-6	NO_3^-	Nitrate	99.9	100.0	0.1
LCS	SO_4^{3-}	Sulfate	97.4	101.5	4.1

LAB ID	SYMBOL	TEST	UNITS	QA/QC Results Sample	Dup.	RPD(%)
1503-6	---	Alkalinity	mg/L $CaCO_3$	540	555	2.7
1503-6	HCO_3^-	Bicarbonate	mg/L	540	555	2.7
1503-6	CO_3	Carbonate	mg/L	ND<10	ND<10	0.0
1503-6	---	EC	umhos/cm	1760	1760	0.0
1503-6	--	pH	units	6.55	6.55	0.0
1503-6	TDS	TDS	mg/L	2040	1800	12.5

EPA 8015M/602

Matrix Spikes

Lab ID 1506-0	MS	MSD	RPD (%)	Control Limits
	% Recovery			
Benzene	96	100	3	50/134
Toluene	96	97	1	40/143
Ethylbenzene	99	99	0	40/135
Xylenes	103	103	0	33/135

Metals - Waters

LAB ID	METAL		% Recovery MS	MSD	RPD(%)	Control Limits
1503-7	Ca	Calcium*	99.3	98.1	1.2	69/135
	Cu	Copper	88.6	83.3	6.2	62/119
	Fe	Iron*	99.7	98.3	1.4	81/119
	Mg	Magnesium*	98.1	98.1	0.0	78/123
	Mn	Manganese	94.3	90.5	4.1	72/114
	K	Potassium	88.5	85.8	3.0	78/131
	Na	Sodium*	102.6	102.6	0.0	51/126
	Zn	Zinc	90.4	88.2	2.5	71/114

*: LCS used as control.

A1503.qa

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Quality Assurance Addendum Report

EPA 624

Surrogate Spikes

Lab ID	$DCAd_4$	$Told_8$	BFB
	% Recovery		
1503-0	93	100	94
1503-4	92	100	91
1503-8	90	98	94
1503-12	94	100	103
1503-16	90	101	78
1503-20	97	100	97
1503-24	104	103	95
1503-28	91	98	86
1503-30	92	102	71

Matrix Spikes

Lab ID 1503-28	MS	MSD	RPD(%)	Control Limits
	% Recovery			
1,1-Dichloroethene	89	84	7	57/139
Benzene	102	99	3	80/119
Trichloroethene	100	94	7	78/126
Toluene	102	92	10	74/123
Chlorobenzene	100	96	4	81/127

A1503.qa

Processed by KOPY KAT

Quality Assurance Addendum Report

Notes:

Note that Matrix Spikes are not project specific. Therefore, spike information shown on this report may not be from the same project; however, they were analyzed in the same analytical batch.

Definitions:

Spike: A sample from the analytical batch which has been spiked with the parameter(s) of interest at a known concentration and taken through the same preparation and analysis as the samples.

Spike Duplicate: A duplicate of the spiked sample, taken from a separate aliquot of the sample.

RPD: Relative Percent Difference between a Spike and a Spike Duplicate (or a sample and sample duplicate).
RPD = [(Spike-Spk. Dup.)/Mean] * 100

Where the mean is the average spike recovery of the matrix spike and the matrix spike duplicate.

Mean: The average sample results, from both samples and sample duplicates.

Control limits are calculated by SCS Analytical Laboratory for internal use from existing spike data. Control limits are found by calculating three standard deviations above and below the mean of the population.

A1503.qa

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CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

1503

COMPANY NAME: SCS	CARRIER:		TURNAROUND TIME REQUIRED: ☑ NORMAL ☐ 5-DAY ☐ 3-DAY ☐ 24-HOUR ☐ IMMEDIATE ATTENTION
ADDRESS:	SHIPMENT DATE: 2-4-94		
PHONE NUMBER:	SHIPPING NUMBER:		
P.O. NUMBER:	NUMBER OF SAMPLES:	PAGE 1 OF 2	

PROJECT NAME: Angeles Chemical
PROJECT ADDRESS: Santa Fe Springs
PROJECT NUMBER: 0185016.01
SAMPLER NAME AND SIGNATURE: B. Watterson B.C. Wells
REPORTS TO BE SENT TO: B. Watterson

SCS TAG #	SAMPLE ID NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE/TYPE	DATE/TIME COLLECTED	FIELD TEMP	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA-SOP & QAM REF	624	General Quality	Speciate Free Product 8015m	[illegible]							LAB ONLY SAMPLE CONDITION UPON RECEIPT
SCS 0,1	MW-1		H_2O	HCl	2-40 ml VOA	2-3-94					X										Cold
2,3	MW-1 (*)	free product	↓	None	2-1 l bottles	↓							X								↓
4,5	MW-2		↓	HCl	2-40 ml VOA	↓					X										↓
6,7	MW-2		↓	HNO_3	2-1 l bottles	↓						X									↓
8,9	MW-3		↓	HCl	2-40 ml VOA	↓					X										↓
10,11	MW-3		↓	HNO_3	2-1 l bottles	↓						X									↓
12,13	MW-4		↓	HCL	2-40 ml VOA	↓					X										↓
14,15	MW-4			HNO_3	2-1 l bottles	↓						X		N							↓
16,17	MW-6			HCL	2-40 ml VOA	↓					X										↓
18,19	MW-6			HNO_3	2-1 l bottles	↓						X									↓

SPECIAL INSTRUCTIONS/COMMENTS:
(*) Bottles rinsed out & some free product collected (in 2 bottles). Need to determine what free product is - speciate run 8015 or whatever to determine.

RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE:	RECEIVED BY: (Signature)
B.C. Wells	2-4-94	[signature]			
COMPANY: SCS	TIME	COMPANY: SCS Lab 2/4/94	COMPANY:	TIME:	COMPANY

02/91 SCS ANALYTICAL LABORATORY 2860 Walnut Avenue • Long Beach, California 90806 - (213) 595-9324
9:00 AM.

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

1503

COMPANY NAME: SCS	CARRIER:		TURNAROUND TIME REQUIRED: ☑ NORMAL ☐ 5-DAY ☐ 3-DAY ☐ 24-HOUR ☐ IMMEDIATE ATTENTION
ADDRESS:	SHIPMENT DATE: 2-4-94		
PHONE NUMBER:	SHIPPING NUMBER:		
P.O. NUMBER:	NUMBER OF SAMPLES:	PAGE 2 OF 2	

PROJECT NAME: Angeles Chemical

PROJECT ADDRESS: Santa Fe Springs

PROJECT NUMBER: 0185016.01

SAMPLER NAME AND SIGNATURE: B. Watterson B.G. Watt

REPORTS TO BE SENT TO: B. Watterson

X's Mg-H	SAMPLE I.D. NUMBER	SAMPLE DESCRIPTION	SAMPLE MATRIX	SAMPLE PRESERVATIVE(S)	CONTAINER SIZE/TYPE	DATE/TIME COLLECTED	FIELD TEMP	FIELD pH	FIELD EC	SPECIAL PROGRAM REQUIREMENTS OR EPA-SOP & QAM REF	ANALYSES REQUIRED: 624	General Quality	~~Fecal Coliform~~								LAB ONLY: SAMPLE CONDITION UPON RECEIPT
503 20,21	MW-6D		H_2O	HCL	2-40ml VOA						X										Cold
22,23	MW-6D		↓	HNO_3/	2-1l bottles							X									↓
24,25	MW-7		↓	HCL	2-40ml VOA						X										↓
26,27	MW-7		↓	HNO_3	2-1l bottles							X	[illegible]								↓
28,29	Rinsate				2-40ml VOA						X										
30	Trip blank										X										

SPECIAL INSTRUCTIONS/COMMENTS:

RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)	RELINQUISHED BY: (Signature)	DATE	RECEIVED BY: (Signature)
B.G. Watt	2-4-94	Andrew [illegible]			
COMPANY: SCS	TIME	COMPANY: SCS Lab 2/4/94	COMPANY	TIME	COMPANY

02/91 SCS ANALYTICAL LABORATORY 2860 Walnut Avenue • Long Beach, California 90806 - (213) 595-9324

9:00 A.M.

Processed by KOPY KAT

SCS ANALYTICAL LABORATORY
2860 WALNUT AVENUE
LONG BEACH, CALIFORNIA 90806
(310) 595-4324
FAX (310) 595-6709

MEMO

TO: Brian Watterson

March 2, 1994

JOB NO.: 0185016.01
FOLDER NO.: 1503a

LABORATORY REPORT

Samples: Twenty nine (29) water samples, one (1) free product and one (1) tripblank from Angeles Chemical, Santa Fe Springs, collected on 02/03/94 and received on 02/04/94. Twenty two (22) samples to be analyzed, the remainder to be analyzed. Additional analysis requested on 02/21/94.

EPA 8240 - See attached sheets.

Reviewed by	Approved by

a1503a.rep

Processed by KOPY KAT

Addendum Report, EPA 8240

Sample I.D.: MW-1
Date Received: 02/04/94
Date Analyzed: 02/25/94
Matrix: free product
Project #: 0185016.01
File #: a1503a.rep

CAS #	Compound	Result	R.L.
		µg/L (ppb)	
67-64-1	Acetone	12,400	2,500
107-02-8	Acrolein	ND	2,500
107-13-1	Acrylonitrile	ND	2,500
71-43-2	Benzene	ND	250
75-27-4	Bromodichloromethane	ND	250
75-25-2	Bromoform	ND	250
74-83-9	Bromomethane	ND	1,500
78-93-3	2-Butanone	6,150	2,500
75-15-0	Carbon Disulfide	ND	250
56-23-5	Carbon Tetrachloride	ND	250
108-90-7	Chlorobenzene	ND	250
75-00-3	Chloroethane	ND	1,500
110-75-8	2-Chloroethyl Vinyl Ether	ND	2,500
67-66-3	Chloroform	ND	250
74-87-3	Chloromethane	ND	1,500
74-95-3	Dibromomethane	ND	250
124-48-1	Dibromochloromethane	ND	250
541-73-1	1,3-Dichlorobenzene	ND	250
106-46-7	1,4-Dichlorobenzene	ND	250
95-50-1	1,2-Dichlorobenzene	ND	250
110-56-5	1,4-Dichloro-2-butene	ND	250
75-71-8	Dichlorodifluoromethane	ND	250
75-34-3	1,1-Dichloroethane	452	250
107-06-2	1,2-Dichloroethane	ND	250
75-35-4	1,1-Dichloroethene	1,910	250
156-60-5	trans-1,2-Dichloroethene	ND	250
78-87-5	1,2-Dichloropropane	ND	250
10061-01-5	cis-1,3-Dichloropropene	ND	250
10061-02-6	trans-1,3-Dichloropropene	ND	250
64-17-5	Ethanol	ND	250
100-41-4	Ethylbenzene	1,240	250
97-63-2	Ethyl Methacrylate	ND	250
591-78-6	2-Hexanone	ND	1,500
74-88-4	Iodomethane	ND	250
75-09-2	Methylene Chloride	ND	2,500
108-10-1	4-Methyl-2-Pentanone	3,320	1,500

R.L. = Reporting Limit
ND = Not Detected

* Sample analyzed outside of holding times.

Processed by KOPY KAT

Addendum Report, EPA 8240 (Cont.)

Sample I.D.: MW-1
Date Received: 02/04/94
Date Analyzed: 02/25/94
Matrix: free product
Project #: 0185016.01
File #: a1503a.rep

CAS #	Compound	Result	R.L.
		µg/L (ppb)	
100-42-5	Styrene	ND	250
79-34-5	1,1,2,2-Tetrachloroethane	ND	250
127-18-4	Tetrachloroethene	7,980	250
108-88-3	Toluene	463	250
71-55-6	1,1,1-Trichloroethane	4,780	250
79-00-5	1,1,2-Trichloroethane	ND	250
79-01-6	Trichloroethene	2,720	250
75-69-4	Trichlorofluoromethane	ND	250
96-18-4	1,2,3-Trichloropropane	ND	250
108-05-4	Vinyl Acetate	ND	1,500
75-01-4	Vinyl Chloride	ND	1,500
1330-20-7	m- and p-Xylenes	5,750	250
95-47-6	o-Xylene	3,560	250

R.L. = Reporting Limit
ND = Not Detected

Processed by KOPY KAT

Quality Assurance Addendum Report

EPA 8240

Surrogate Spikes

Lab ID	$DCAd_4$	$Told_8$	BFB
	% Recovery		
1503-3	79	101	90

Matrix Spikes

Lab ID 1583-20	MS	MSD	RPD(%)	Control Limits
	% Recovery			
1,1-Dichloroethene	87	95	9	57/139
Benzene	84	93	10	80/119
Trichloroethene	83	93	11	78/126
Toluene	81	93	13	74/123
Chlorobenzene	91	103	13	81/127

Notes:

Note that Matrix Spikes are not project specific. Therefore, spike information shown on this report may not be from the same project; however, they were analyzed in the same analytical batch.

Definitions:

Spike: A sample from the analytical batch which has been spiked with the parameter(s) of interest at a known concentration and taken through the same preparation and analysis as the samples.

Spike Duplicate: A duplicate of the spiked sample, taken from a separate aliquot of the sample.

RPD: Relative Percent Difference between a Spike and a Spike Duplicate (or a sample and sample duplicate).
RPD = [(Spike-Spk. Dup.)/Mean] * 100

Where the mean is the average spike recovery of the matrix spike and the matrix spike duplicate.

Mean: The average sample results, from both samples and sample duplicates.

Control limits are calculated by SCS Analytical Laboratory for internal use from existing spike data. Control limits are found by calculating three standard deviations above and below the mean of the population.

1503a.qa

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Appendix B3: Well Permits

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COUNTY OF LOS ANGELES

DEPARTMENT OF HEALTH SERVICES

RECEIPT/RECIBO

- [ ] HARBOR-UCLA MEDICAL CENTER
- [ ] HIGH DESERT HOSPITAL
- [ ] KING/DREW MEDICAL CENTER
- [ ] OLIVE VIEW MEDICAL CENTER
- [ ] RANCHO LOS AMIGOS MEDICAL CENTER
- [ ] LAC-USC MEDICAL CENTER
- [x] PUBLIC HEALTH

SPECIFY: Water + Sewage Tribes

ANY ALTERATION OR ERASURE RENDERS RECEIPT VOID

CUALQUIER ALTERACION O BORRON HACE ESTE RECIBO NULO

DATE 2/3/94

RECEIVED FROM SCS ENGINEERS $ 665.00

THE AMOUNT OF Six Hundred Sixty-five Environmental Consultants and 00/100

- [ ] CASH
- [ ] MONEY ORDER #
- [x] CHECK # 08868
- [ ] VISA
- [ ] ~~MASTER CARD~~ #

~~PATIENT NAME~~ Five(5) Monitoring Well Permits

PF #

ACCOUNT NO

DATE(S) OF SERVICE

PAYMENT RECEIVED FOR
- [ ] MEDICAL SERVICES
- [ ] PHARMACY

~~MISCELLANEOUS~~ 8915 Sorenson Ave.
Santa Fe Springs, CA

RECEIVED BY A. Wilson

No. 284843

HS-65 70C50R (9/90) 10/90

PATIENT'S COPY

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APPENDIX C

CPT Data and Interpretation

Processed by KOPY KAT

APPENDIX C

Processed by KOPY KAT

APPENDIX C

CPT Data and Interpretation

Processed by KOPY KAT

T O N T O

ENVIRONMENTAL DRILLING, INC.

8482 Cherry Avenue, Fontana, California 92335 Phone (800) 350-6411 (909) 357-0881 Fax (909) 357-9307
2120 Blumenfeld Drive, Sacramento, California 95815 Phone (916) 646-6611 Fax (916) 646-1145

November 24, 1993

Brian Watterson
SCS ENGINEERS
3711 Long Beach Boulevard, 9th Floor
Long Beach, CA 90807

Subject: CPT Interpretation J.N. 244-7165
Project No. 0185016.01
Angeles Chemical Company
Sante Fe Springs, California

Dear Mr. Watterson:

Please find enclosed CPT interpretations for measurements obtained at the above site on November 17, 1993, per your request.

For interpretation purposes groundwater depths indicated were assumed to be 8 meters -- actual depth may differ. Total unit weight was assumed to be 115 pcf.

Soil parameters are estimates based on averaged values. This data should be used only as a guide -- specific design values should be obtained by the Engineer using correlation techniques applicable to specific soil conditions, laboratory tests, and local experience.

Please call if you have questions or if we may be of further service. We look forward to working with you on future projects.

Sincerely,

Donna Gobel for

Mark E. Best, P.E.
Vice President

Enclosures: CPT Interpretation
Cone Penetration Record
Data Disk

Processed by KOPY KAT

TONTO ENVIRONMENTAL DRILLING

Engineer SCS
On Site Loc:CPT-1
Job No. :0185016.01
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :11/17/93 9:37
Cone Used :379
Water table (meters) : 8

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	91.20	1.37	1.50	0.02	silty sand to sandy silt	>90	>48	29	UNDEFINED
0.50	1.64	48.58	0.65	1.34	0.07	silty sand to sandy silt	80-90	>48	16	UNDEFINED
0.75	2.46	72.40	1.04	1.43	0.12	silty sand to sandy silt	80-90	>48	23	UNDEFINED
1.00	3.28	58.66	1.88	3.21	0.17	sandy silt to clayey silt	UNDFND	UNDFD	22	3.9
1.25	4.10	22.50	0.66	2.94	0.21	clayey silt to silty clay	UNDFND	UNDFD	11	1.4
1.50	4.92	20.70	0.55	2.67	0.26	clayey silt to silty clay	UNDFND	UNDFD	10	1.3
1.75	5.74	20.08	0.64	3.18	0.31	clayey silt to silty clay	UNDFND	UNDFD	10	1.3
2.00	6.56	17.82	0.56	3.14	0.35	clayey silt to silty clay	UNDFND	UNDFD	9	1.1
2.25	7.38	11.08	0.33	2.52	0.40	clayey silt to silty clay	UNDFND	UNDFD	6	.8
2.50	8.20	14.78	0.28	1.91	0.45	clayey silt to silty clay	UNDFND	UNDFD	7	.9
2.75	9.02	31.90	0.41	1.28	0.50	silty sand to sandy silt	40-50	38-40	10	UNDEFINED
3.00	9.84	58.10	1.85	3.19	0.54	sandy silt to clayey silt	UNDFND	UNDFD	22	3.8
3.25	10.66	59.72	2.05	3.44	0.59	clayey silt to silty clay	UNDFND	UNDFD	29	3.9
3.50	11.48	33.04	0.50	1.51	0.64	sandy silt to clayey silt	UNDFND	UNDFD	13	2.1
3.75	12.30	52.66	1.23	2.33	0.68	sandy silt to clayey silt	UNDFND	UNDFD	20	3.4
4.00	13.12	35.88	0.80	2.24	0.73	sandy silt to clayey silt	UNDFND	UNDFD	14	2.3
4.25	13.94	30.18	1.00	3.29	0.78	clayey silt to silty clay	UNDFND	UNDFD	15	1.9
4.50	14.76	44.34	1.09	2.46	0.83	sandy silt to clayey silt	UNDFND	UNDFD	17	2.9
4.75	15.58	56.22	0.77	1.37	0.87	silty sand to sandy silt	50-60	38-40	18	UNDEFINED
5.00	16.40	70.86	0.77	1.09	0.92	silty sand to sandy silt	50-60	38-40	23	UNDEFINED
5.25	17.22	140.68	1.23	0.87	0.97	sand to silty sand	70-80	42-44	34	UNDEFINED
5.50	18.04	121.02	1.12	0.92	1.01	sand to silty sand	70-80	40-42	29	UNDEFINED
5.75	18.86	85.66	1.02	1.19	1.06	sand to silty sand	60-70	40-42	21	UNDEFINED
6.00	19.69	98.70	1.00	1.01	1.11	sand to silty sand	60-70	40-42	24	UNDEFINED
6.25	20.51	133.28	1.64	1.23	1.16	sand to silty sand	70-80	40-42	32	UNDEFINED
6.50	21.33	266.84	2.29	0.86	1.20	sand	>90	44-46	>50	UNDEFINED
6.75	22.15	326.18	1.38	0.42	1.25	gravelly sand to sand	>90	44-46	>50	UNDEFINED
7.00	22.97	365.32	2.60	0.71	1.30	gravelly sand to sand	>90	44-46	>50	UNDEFINED
7.25	23.79	459.58	4.50	0.98	1.34	sand	>90	46-48	>50	UNDEFINED
7.50	24.61	371.66	4.67	1.26	1.39	sand	>90	44-46	>50	UNDEFINED
7.75	25.43	139.88	3.23	2.31	1.44	silty sand to sandy silt	70-80	40-42	45	UNDEFINED
8.00	26.25	96.84	2.88	2.97	1.49	sandy silt to clayey silt	UNDFND	UNDFD	37	6.3
8.25	27.07	49.26	0.93	1.89	1.52	silty sand to sandy silt	40-50	34-36	16	UNDEFINED
8.50	27.89	64.30	2.13	3.31	1.54	sandy silt to clayey silt	UNDFND	UNDFD	25	4.1
8.75	28.71	74.28	2.97	4.00	1.56	clayey silt to silty clay	UNDFND	UNDFD	36	4.8
9.00	29.53	45.76	1.56	3.42	1.58	clayey silt to silty clay	UNDFND	UNDFD	22	2.9
9.25	30.35	57.88	2.16	3.74	1.61	clayey silt to silty clay	UNDFND	UNDFD	28	3.7
9.50	31.17	62.66	1.82	2.91	1.63	sandy silt to clayey silt	UNDFND	UNDFD	24	4.0
9.75	31.99	41.10	0.92	2.24	1.65	sandy silt to clayey silt	UNDFND	UNDFD	16	2.6
10.00	32.81	36.24	0.89	2.47	1.67	sandy silt to clayey silt	UNDFND	UNDFD	14	2.2

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 15

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

Processed by KOPY KAT

TONTO ENVIRONMENTAL DRILLING

Engineer SCS On Site Loc:CPT-1 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
10.25	33.63	39.10	0.90	2.30	1.69	sandy silt to clayey silt	UNDFND	UNDFD	15	2.4
10.50	34.45	39.04	0.68	1.73	1.71	sandy silt to clayey silt	UNDFND	UNDFD	15	2.4
10.75	35.27	55.04	1.48	2.69	1.74	sandy silt to clayey silt	UNDFND	UNDFD	21	3.5

Dr - All sands (Janiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 15

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINT21 (v 3.04) ****

by KOPY KAT

TONTO ENVIRONMENTAL DRILLING

Engineer SCS
On Site Loc: CPT-3
Job No. :0185016.01
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :11/17/93 9:37
Cone Used :379
Water table (meters) : 8

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Dr - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	69.48	0.91	1.31	0.02	silty sand to sandy silt	>90	>48	22	UNDEFINED
0.50	1.64	51.02	0.90	1.77	0.07	silty sand to sandy silt	80-90	>48	16	UNDEFINED
0.75	2.46	34.70	0.67	1.91	0.12	sandy silt to clayey silt	UNDEFND	UNDFD	13	2.3
1.00	3.28	36.38	1.04	2.87	0.17	sandy silt to clayey silt	UNDEFND	UNDFD	14	2.4
1.25	4.10	20.92	0.60	2.87	0.21	clayey silt to silty clay	UNDEFND	UNDFD	10	1.3
1.50	4.92	19.08	0.49	2.57	0.26	clayey silt to silty clay	UNDEFND	UNDFD	9	1.2
1.75	5.74	16.90	0.44	2.63	0.31	clayey silt to silty clay	UNDEFND	UNDFD	8	1.1
2.00	6.56	13.82	0.29	2.07	0.35	clayey silt to silty clay	UNDEFND	UNDFD	7	.8
2.25	7.38	12.54	0.22	1.78	0.40	clayey silt to silty clay	UNDEFND	UNDFD	6	.8
2.50	8.20	17.08	0.26	1.51	0.45	sandy silt to clayey silt	UNDEFND	UNDFD	7	1.1
2.75	9.02	37.70	0.36	0.96	0.50	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.00	9.84	45.10	0.57	1.27	0.54	silty sand to sandy silt	50-60	40-42	14	UNDEFINED
3.25	10.66	38.50	0.58	1.50	0.59	silty sand to sandy silt	40-50	38-40	12	UNDEFINED
3.50	11.48	49.44	1.07	2.16	0.64	sandy silt to clayey silt	UNDEFND	UNDFD	19	3.2
3.75	12.30	60.92	1.42	2.34	0.68	sandy silt to clayey silt	UNDEFND	UNDFD	23	4.0
4.00	13.12	87.78	0.92	1.05	0.73	sand to silty sand	60-70	40-42	21	UNDEFINED
4.25	13.94	172.28	0.88	0.51	0.78	sand	80-90	44-46	33	UNDEFINED
4.50	14.76	187.40	1.11	0.59	0.83	sand	80-90	44-46	36	UNDEFINED
4.75	15.58	216.10	0.93	0.43	0.87	sand	>90	44-46	41	UNDEFINED
5.00	16.40	264.92	1.27	0.48	0.92	sand	>90	44-46	>50	UNDEFINED
5.25	17.22	324.62	1.70	0.52	0.97	gravelly sand to sand	>90	46-48	>50	UNDEFINED
5.50	18.04	332.02	2.77	0.84	1.01	sand	>90	46-48	>50	UNDEFINED
5.75	18.86	317.80	1.84	0.58	1.06	gravelly sand to sand	>90	44-46	>50	UNDEFINED
6.00	19.69	367.14	1.60	0.44	1.11	gravelly sand to sand	>90	46-48	>50	UNDEFINED
6.25	20.51	367.54	1.51	0.41	1.16	gravelly sand to sand	>90	44-46	>50	UNDEFINED
6.50	21.33	444.86	3.22	0.72	1.20	gravelly sand to sand	>90	46-48	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 15

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTRI (v 3.04) ****

Processed by KOPY KAT

TONTO ENVIRONMENTAL DRILLING

¶

Engineer SCS
On Site Loc:CPT-4
Job No. :0185016.01
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :11/17/93 9:37
Cone Used :379
Water table (meters) : 8

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Dq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	73.02	1.11	1.51	0.02	silty sand to sandy silt	>90	>48	23	UNDEFINED
0.50	1.64	36.48	1.22	3.33	0.07	clayey silt to silty clay	UNDEFND	UNDEFD	17	2.4
0.75	2.46	42.52	1.27	2.99	0.12	sandy silt to clayey silt	UNDEFND	UNDEFD	16	2.8
1.00	3.28	20.96	0.48	2.30	0.17	clayey silt to silty clay	UNDEFND	UNDEFD	10	1.3
1.25	4.10	21.52	0.65	3.02	0.21	clayey silt to silty clay	UNDEFND	UNDEFD	10	1.4
1.50	4.92	17.94	0.59	3.29	0.26	clayey silt to silty clay	UNDEFND	UNDEFD	9	1.1
1.75	5.74	16.74	0.48	2.84	0.31	clayey silt to silty clay	UNDEFND	UNDEFD	8	1.0
2.00	6.56	12.98	0.31	2.39	0.35	clayey silt to silty clay	UNDEFND	UNDEFD	6	.8
2.25	7.38	15.32	0.36	2.34	0.40	clayey silt to silty clay	UNDEFND	UNDEFD	7	.9
2.50	8.20	27.92	0.54	1.94	0.45	sandy silt to clayey silt	UNDEFND	UNDEFD	11	1.8
2.75	9.02	43.90	0.77	1.75	0.50	silty sand to sandy silt	50-60	40-42	14	UNDEFINED
3.00	9.84	37.16	0.99	2.66	0.54	sandy silt to clayey silt	UNDEFND	UNDEFD	14	2.4
3.25	10.66	16.46	0.48	2.93	0.59	clayey silt to silty clay	UNDEFND	UNDEFD	8	1.0
3.50	11.48	20.72	0.66	3.19	0.64	clayey silt to silty clay	UNDEFND	UNDEFD	10	1.3
3.75	12.30	19.38	0.42	2.17	0.68	clayey silt to silty clay	UNDEFND	UNDEFD	9	1.2
4.00	13.12	25.18	0.74	2.95	0.73	clayey silt to silty clay	UNDEFND	UNDEFD	12	1.6
4.25	13.94	33.96	0.99	2.90	0.78	clayey silt to silty clay	UNDEFND	UNDEFD	16	2.2
4.50	14.76	18.52	0.50	2.72	0.83	clayey silt to silty clay	UNDEFND	UNDEFD	9	1.1
4.75	15.58	37.06	0.93	2.51	0.87	sandy silt to clayey silt	UNDEFND	UNDEFD	14	2.4
5.00	16.40	49.54	1.23	2.48	0.92	sandy silt to clayey silt	UNDEFND	UNDEFD	19	3.2
5.25	17.22	67.68	0.83	1.22	0.97	silty sand to sandy silt	50-60	38-40	22	UNDEFINED
5.50	18.04	165.84	1.77	1.07	1.01	sand to silty sand	80-90	42-44	40	UNDEFINED
5.75	18.86	143.18	1.40	0.98	1.06	sand to silty sand	70-80	42-44	34	UNDEFINED
6.00	19.69	110.74	1.02	0.92	1.11	sand to silty sand	60-70	40-42	27	UNDEFINED
6.25	20.51	257.14	2.09	0.81	1.16	sand	>90	44-46	49	UNDEFINED
6.50	21.33	448.52	3.92	0.87	1.20	gravelly sand to sand	>90	46-48	>50	UNDEFINED
6.75	22.15	432.42	2.59	0.60	1.25	gravelly sand to sand	>90	46-48	>50	UNDEFINED
7.00	22.97	541.78	3.02	0.56	1.30	gravelly sand to sand	>90	46-48	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 15

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINT21 (v 3.04) ****

Processed by KOPY KAT

TONTO ENVIRONMENTAL DRILLING

Engineer SCS
On Site Loc:CPT-5
Job No. :0185016.01
Tot. Unit Wt. (avg) : 115 pcf

CPT Date :11/17/93 9:37
Cone Used :379
Water table (meters) : 8

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Dr - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	118.86	2.71	2.28	0.02	silty sand to sandy silt	>90	>48	38	UNDEFINED
0.50	1.64	91.88	3.31	3.60	0.07	sandy silt to clayey silt	UNDEFINED	UNDEFINED	35	6.1
0.75	2.46	35.48	1.10	3.11	0.12	clayey silt to silty clay	UNDEFINED	UNDEFINED	17	2.3
1.00	3.28	20.30	0.81	4.00	0.17	silty clay to clay	UNDEFINED	UNDEFINED	13	1.3
1.25	4.10	17.66	0.71	4.04	0.21	silty clay to clay	UNDEFINED	UNDEFINED	11	1.1
1.50	4.92	15.64	0.59	3.79	0.26	silty clay to clay	UNDEFINED	UNDEFINED	10	1.0
1.75	5.74	12.60	0.40	3.14	0.31	silty clay to clay	UNDEFINED	UNDEFINED	8	.8
2.00	6.56	10.64	0.22	2.09	0.35	clayey silt to silty clay	UNDEFINED	UNDEFINED	5	.6
2.25	7.38	10.04	0.24	2.38	0.40	silty clay to clay	UNDEFINED	UNDEFINED	6	.6
2.50	8.20	17.86	0.32	1.81	0.45	sandy silt to clayey silt	UNDEFINED	UNDEFINED	7	1.1
2.75	9.02	18.30	0.37	2.03	0.50	clayey silt to silty clay	UNDEFINED	UNDEFINED	9	1.1
3.00	9.84	43.74	1.45	3.31	0.54	clayey silt to silty clay	UNDEFINED	UNDEFINED	21	2.8
3.25	10.66	53.68	2.08	3.87	0.59	clayey silt to silty clay	UNDEFINED	UNDEFINED	26	3.5
3.50	11.48	27.92	0.95	3.39	0.64	clayey silt to silty clay	UNDEFINED	UNDEFINED	13	1.8
3.75	12.30	14.22	0.30	2.09	0.68	clayey silt to silty clay	UNDEFINED	UNDEFINED	7	.9
4.00	13.12	20.40	0.59	2.89	0.73	clayey silt to silty clay	UNDEFINED	UNDEFINED	10	1.3
4.25	13.94	22.54	0.59	2.62	0.78	clayey silt to silty clay	UNDEFINED	UNDEFINED	11	1.4
4.50	14.76	35.76	1.02	2.86	0.83	sandy silt to clayey silt	UNDEFINED	UNDEFINED	14	2.3
4.75	15.58	57.74	1.07	1.85	0.87	silty sand to sandy silt	50-60	38-40	18	UNDEFINED
5.00	16.40	208.34	1.39	0.67	0.92	sand	80-90	44-46	40	UNDEFINED
5.25	17.22	313.54	1.32	0.42	0.97	gravelly sand to sand	>90	46-48	>50	UNDEFINED
5.50	18.04	294.82	1.33	0.45	1.01	gravelly sand to sand	>90	44-46	47	UNDEFINED
5.75	18.86	282.12	1.07	0.38	1.06	gravelly sand to sand	>90	44-46	45	UNDEFINED
6.00	19.69	358.90	2.67	0.74	1.11	sand	>90	46-48	>50	UNDEFINED
6.25	20.51	425.08	3.64	0.86	1.16	gravelly sand to sand	>90	46-48	>50	UNDEFINED
6.50	21.33	442.22	1.89	0.43	1.20	gravelly sand to sand	>90	46-48	>50	UNDEFINED
6.75	22.15	411.30	1.40	0.34	1.25	gravelly sand to sand	>90	46-48	>50	UNDEFINED
7.00	22.97	423.40	1.84	0.44	1.30	gravelly sand to sand	>90	46-48	>50	UNDEFINED
7.25	23.79	449.30	1.66	0.37	1.34	gravelly sand to sand	>90	46-48	>50	UNDEFINED
7.50	24.61	444.50	2.37	0.53	1.39	gravelly sand to sand	>90	44-46	>50	UNDEFINED
7.75	25.43	407.52	3.16	0.77	1.44	gravelly sand to sand	>90	44-46	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 15

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINT31 (v 3.04) ****

Processed by KOPY KAT

TONTO ENVIRONMENTAL DRILLING

Engineer SCS
On Site Loc: CPT-6
Job No. : 0185016.01
Tot. Unit Wt. (avg) : 115 pcf

CPT Date : 11/17/93 9:37
Cone Used : 379
Water table (meters) : 8

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Dq - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	181.52	1.65	0.91	0.02	sand	>90	>48	35	UNDEFINED
0.50	1.64	67.90	1.34	1.97	0.07	silty sand to sandy silt	>90	>48	22	UNDEFINED
0.75	2.46	23.28	0.36	1.55	0.12	sandy silt to clayey silt	UNDEFD	UNDEFD	9	1.5
1.00	3.28	33.94	0.45	3.23	0.17	silty clay to clay	UNDEFD	UNDEFD	9	.9
1.25	4.10	16.24	0.45	2.75	0.21	clayey silt to silty clay	UNDEFD	UNDEFD	8	1.0
1.50	4.92	16.16	0.49	3.05	0.26	clayey silt to silty clay	UNDEFD	UNDEFD	8	1.0
1.75	5.74	16.02	0.50	3.14	0.31	clayey silt to silty clay	UNDEFD	UNDEFD	8	1.0
2.00	6.56	23.68	0.38	2.77	0.35	clayey silt to silty clay	UNDEFD	UNDEFD	7	.8
2.25	7.38	12.42	0.37	2.95	0.40	silty clay to clay	UNDEFD	UNDEFD	8	.8
2.50	8.20	15.18	0.32	2.12	0.45	clayey silt to silty clay	UNDEFD	UNDEFD	7	.9
2.75	9.02	20.34	0.94	3.10	0.50	clayey silt to silty clay	UNDEFD	UNDEFD	15	1.9
3.00	9.84	65.48	1.61	1.52	0.54	clayey silt to silty clay	UNDEFD	UNDEFD	22	2.9
3.25	10.66	52.64	2.47	4.70	0.59	silty clay to clay	UNDEFD	UNDEFD	34	2.4
3.50	11.48	48.58	2.21	4.55	0.64	silty clay to clay	UNDEFD	UNDEFD	31	3.1
3.75	12.30	39.22	1.83	4.68	0.68	silty clay to clay	UNDEFD	UNDEFD	25	2.5
4.00	13.12	39.28	1.68	4.28	0.73	silty clay to clay	UNDEFD	UNDEFD	25	2.5
4.25	13.94	42.04	1.26	3.00	0.78	sandy silt to clayey silt	UNDEFD	UNDEFD	16	1.7
4.50	14.76	34.34	1.50	4.38	0.83	silty clay to clay	UNDEFD	UNDEFD	22	2.2
4.75	15.58	31.30	1.44	4.58	0.87	silty clay to clay	UNDEFD	UNDEFD	20	2.0
5.00	16.40	44.76	1.97	4.03	0.92	clayey silt to silty clay	UNDEFD	UNDEFD	23	3.2
5.25	17.22	164.62	2.41	1.47	0.97	sand to silty sand	80-90	42-44	39	UNDEFINED
5.50	18.04	224.46	3.38	1.06	1.01	sand	80-90	44-46	43	UNDEFINED
5.75	18.86	233.62	1.97	0.84	1.06	sand	>90	44-46	45	UNDEFINED
6.00	19.69	270.32	1.16	0.43	1.11	gravelly sand to sand	>90	44-46	43	UNDEFINED
6.25	20.51	374.90	1.96	0.52	1.16	gravelly sand to sand	>90	46-48	>50	UNDEFINED
6.50	21.33	452.68	2.20	0.49	1.20	gravelly sand to sand	>90	46-48	>50	UNDEFINED
6.75	22.15	500.54	2.80	0.56	1.25	gravelly sand to sand	>90	46-48	>50	UNDEFINED
7.00	22.97	422.34	1.87	0.44	1.30	gravelly sand to sand	>90	46-48	>50	UNDEFINED

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 15

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 3.04) ****

Processed by KOPY KAT

TONTO ENVIRONMENTAL DRILLING

Engineer SCS
On Site Loc: CPT-8
Job No. : 0185016.01
Tot. Unit Wt. (avg) : 115 pcf

CPT Date : 11/17/93 9:37
Cone Used : 379
Water table (meters) : 8

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Dr - Dr (%)	PHI deg.	SPT N	Su tsf
0.25	0.82	79.34	1.27	1.60	0.02	silty sand to sandy silt	>90	>48	25	UNDEFINED
0.50	1.64	19.46	0.65	3.32	0.07	clayey silt to silty clay	UNDEFND	UNDEFD	9	1.2
0.75	2.46	20.36	0.72	3.53	0.12	silty clay to clay	UNDEFND	UNDEFD	13	1.3
1.00	3.28	12.98	0.44	3.38	0.17	silty clay to clay	UNDEFND	UNDEFD	8	.8
1.25	4.10	16.10	0.59	3.65	0.21	silty clay to clay	UNDEFND	UNDEFD	10	1.0
1.50	4.92	22.22	0.81	3.62	0.26	silty clay to clay	UNDEFND	UNDEFD	14	1.4
1.75	5.74	31.08	0.54	1.73	0.31	sandy silt to clayey silt	UNDEFND	UNDEFD	12	2.0
2.00	6.56	60.38	0.23	0.37	0.35	sand to silty sand	60-70	42-44	14	UNDEFINED
2.25	7.38	23.96	0.56	2.33	0.40	sandy silt to clayey silt	UNDEFND	UNDEFD	9	1.5
2.50	8.20	12.50	0.41	3.25	0.45	silty clay to clay	UNDEFND	UNDEFD	8	.8
2.75	9.02	29.48	0.73	2.49	0.50	sandy silt to clayey silt	UNDEFND	UNDEFD	11	1.9
3.00	9.84	30.60	1.05	3.45	0.54	clayey silt to silty clay	UNDEFND	UNDEFD	15	2.0
3.25	10.66	25.12	0.38	1.50	0.59	sandy silt to clayey silt	UNDEFND	UNDEFD	10	1.6
3.50	11.48	13.24	0.42	3.18	0.64	silty clay to clay	UNDEFND	UNDEFD	8	.8
3.75	12.30	14.98	0.45	3.02	0.68	clayey silt to silty clay	UNDEFND	UNDEFD	7	.9
4.00	13.12	14.84	0.31	2.11	0.73	clayey silt to silty clay	UNDEFND	UNDEFD	7	.9
4.25	13.94	32.70	0.97	2.98	0.78	clayey silt to silty clay	UNDEFND	UNDEFD	16	2.1
4.50	14.76	48.00	1.46	3.05	0.83	sandy silt to clayey silt	UNDEFND	UNDEFD	18	3.1
4.75	15.58	60.78	1.76	2.89	0.87	sandy silt to clayey silt	UNDEFND	UNDEFD	23	3.9
5.00	16.40	155.82	1.37	0.88	0.92	sand	80-90	42-44	30	UNDEFINED
5.25	17.22	205.42	1.89	0.92	0.97	sand	80-90	44-46	39	UNDEFINED
5.50	18.04	196.72	2.46	1.25	1.01	sand	80-90	42-44	38	UNDEFINED
5.75	18.86	253.36	2.42	0.95	1.06	sand	>90	44-46	49	UNDEFINED
6.00	19.69	313.54	1.55	0.50	1.11	gravelly sand to sand	>90	44-46	>50	UNDEFINED
6.25	20.51	213.76	1.10	0.51	1.16	sand	80-90	42-44	41	UNDEFINED
6.50	21.33	271.76	1.25	0.46	1.20	sand	>90	44-46	>50	UNDEFINED
6.75	22.15	515.38	2.70	0.52	1.25	gravelly sand to sand	>90	46-48	>50	UNDEFINED
7.00	22.97	467.06	2.97	0.64	1.30	gravelly sand to sand	>90	46-48	>50	UNDEFINED
7.25	23.79	509.36	2.59	0.51	1.34	gravelly sand to sand	>90	46-48	>50	UNDEFINED
7.50	24.61	451.00	1.98	0.44	1.39	gravelly sand to sand	>90	46-48	>50	UNDEFINED
7.75	25.43	408.00	1.63	0.40	1.44	gravelly sand to sand	>90	44-46	>50	UNDEFINED
8.00	26.25	243.34	2.75	1.13	1.49	sand	80-90	42-44	47	UNDEFINED
8.25	27.07	104.06	2.86	2.75	1.52	sandy silt to clayey silt	UNDEFND	UNDEFD	40	6.8
8.50	27.89	112.46	4.36	3.87	1.54	clayey silt to silty clay	UNDEFND	UNDEFD	>50	7.3
8.75	28.71	66.96	1.85	2.76	1.56	sandy silt to clayey silt	UNDEFND	UNDEFD	26	4.3
9.00	29.53	54.20	1.69	3.12	1.58	sandy silt to clayey silt	UNDEFND	UNDEFD	21	3.5
9.25	30.35	30.84	1.00	3.25	1.61	clayey silt to silty clay	UNDEFND	UNDEFD	15	1.9
9.50	31.17	84.12	3.07	3.65	1.63	clayey silt to silty clay	UNDEFND	UNDEFD	40	5.4
9.75	31.99	71.66	2.73	3.81	1.65	clayey silt to silty clay	UNDEFND	UNDEFD	34	4.6
10.00	32.81	41.42	1.21	2.92	1.67	sandy silt to clayey silt	UNDEFND	UNDEFD	16	2.6

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 15

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTRI (v 3.04) ****

Processed by KOPY KAT

TONTO ENVIRONMENTAL DRILLING

Engineer SCS On Site Loc:CPT-8 Page No. 2

DEPTH (meters)	(feet)	Qc (avg) (tsf)	Fs (avg) (tsf)	Rf (avg) (%)	SIGV' (tsf)	SOIL BEHAVIOUR TYPE	Eq - Dr (%)	PHI deg.	SPT N	Su tsf
10.25	33.63	41.46	1.38	3.34	1.69	clayey silt to silty clay	UNDFND	UNDFD	20	2.6
10.50	34.45	67.96	2.01	2.56	1.71	sandy silt to clayey silt	UNDFND	UNDFD	26	4.4
10.75	35.27	121.98	3.58	2.93	1.74	sandy silt to clayey silt	UNDFND	UNDFD	47	7.9

Dr - All sands (Jamiolkowski et al. 1985) PHI - Robertson and Campanella 1983 Su: Nk= 15

**** Note: For interpretation purposes the PLOTTED CPT PROFILE should be used with the TABULATED OUTPUT from CPTINTR1 (v 1.04) ****

Y KOPY KAT

CONE PENETRATION RECORD

JOB NO: 244-7165

CONE ID: 379

LOCATION: Santa Fe Springs

BUBBLE NO.: A

ENGINEER: SCS

PROJECT NO: 0185016.01

PROJECT: Angeles Chemical

DATE: 11-17-93

FILE NO.	HOLE NO.	LOCATION NAME	PREPUNCH/ BACKFILL	TOTAL DEPTH METERS/FEET	GROUNDWATER DEPTH/ HOLE DEPTH FT	REASON FOR TERMINATION/ COMMENTS
2	1	CPT-6	P.P./Grt.	7.10/23.28		Ref. Tip
3	2	CPT-8	P.P./Grt.	10.80/35.42	25.30 APPROX.	
4	3	CPT-5	P.P./Grt	7.90/25.91		Ref. Tip
5	4	CPT-1	P.P./Grt	10.85/35.58		
6	5	CPT-4	P.P./Grt.	7.0/22.96		Ref. Tip
7	6	CPT-3	P.P./Grt	6.70/21.97		Ref. Tip

Processed by KOPY KAT

Processed by KOPY KAT

APPENDIX D

Boring Logs, Well Construction Details, and Well Sampling Field Notes and Survey Data

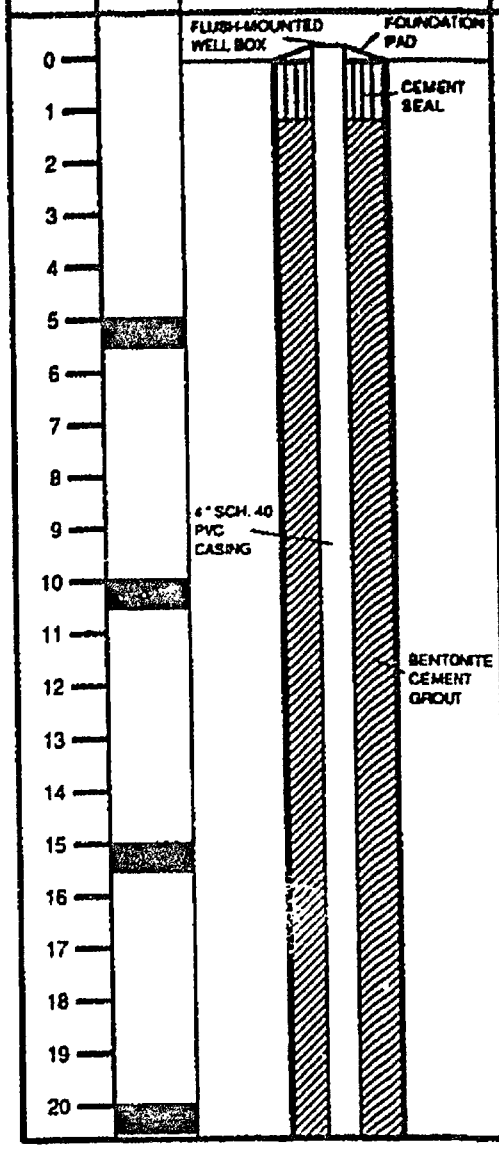
Processed by KOPY KAT

BORING LOG

SCS ENGINEERS
Environmental Consultants
3711 Long Beach Blvd.
Ninth Floor
Long Beach, CA
90807-3315
(310) 424-9544
FAX (310) 427-0805

PROJECT: ANGELES CHEMICAL
LOCATION: SANTA FE SPRINGS
JOB NUMBER: 0185016.01
GEOLOGIST / ENGINEER: B. WATTERSON
DRILLER: H-F DRILLING
DRILL RIG: FAILING (F10)
DRILLING METHOD: HOLLOW STEM AUGER

HOLE / WELL #: MW2
DIAMETER: 11"
TOTAL DEPTH: 50'
DATE STARTED: JANUARY 7, 1994
DATE COMPLETED: JANUARY 7, 1994
SAMPLING DEVICE: 2" SPLIT SPOON
PAGE: 1 OF 3



DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
0						BKGD OVA = 8 ppm
1						
2						
3						
4						
5			MW2-5	4/4/7	CL	BROWN SILTY CLAY, MOIST, NO ODOR
6						
7						
8						
9						
10			MW2-10	10/16/21	ML	LIGHT BROWN CLAYEY SILT, SOME FINE SAND, MOIST, NO ODOR OVA = 10 ppm
11						
12						
13						
14						
15			MW2-15	9/18/25	SM	ORANGE BROWN SILTY SAND (FINE TO MEDIUM GRAINS), MOIST, NO ODOR OVA = 10 ppm
16						
17						
18						
19						LIGHT GRAY SANDY GRAVEL, SOME SILT TO PEBBLE SIZE (1 - 2"), MOIST, NO ODOR OVA = 10 ppm
20			MW2-20	20/45/50	GM	

Processed by KOPY KAT

BORING LOG

PROJECT: ANGELES CHEMICAL
JOB NUMBER: 0185016.01

HOLE / WELL #: MW 2
PAGE: 2 OF 3

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
21		BENTONITE CEMENT GROUT				
22						
23						
24		4" SCH. 40 PVC CASING				
25			MW2-25	18/22/24	CL	BROWN SILTY CLAY, MOIST, NO ODOR OVA = 10 ppm
26						
27		BENTONITE SEAL				
28						
29						
30			MW2-30	8/10/10	CL	BROWN SILTY CLAY, MOIST, NO ODOR OVA = 10 ppm
31						
32						
33						
34						WATER AT ~ 34' BGS
35		4" SCH. 40 PVC 0.020" SLOTTED; FILTER PACK	MW2-35	8/11/20	CL	BROWN/GREEN FAT CLAY, VERY MOIST OVA = 15 ppm
36						
37						
38						
39						
40			MW2-40		CL	BROWN/GREEN FAT CLAY, VERY MOIST, SOME SECTIONS SATURATED OVA = 15 ppm
41						
42						
43						AT 42.5 DRILLER THINKS HE'S ENCOUNTERED ANOTHER SAND/GRAVEL?
44						
45			MW2-45		ML	BROWN CLAYEY SILT, SATURATED, NO ODOR OVA = 15 ppm

Processed by KOPY KAT

BORING LOG

PROJECT: ANGELES CHEMICAL
JOB NUMBER: 0185016.01

HOLE / WELL # : MW2
PAGE : 3 OF 3

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
46						
47		4" SCH. 40 PVC 0.020" SLOTTED; FILTER PACK				
48						
49						
50			MW2 50		ML	SILTS (MINOR CLAY), VISIBLE MICA FLAKES, SATURATED, NO ODOR OVA = 10 ppm TD = 50'

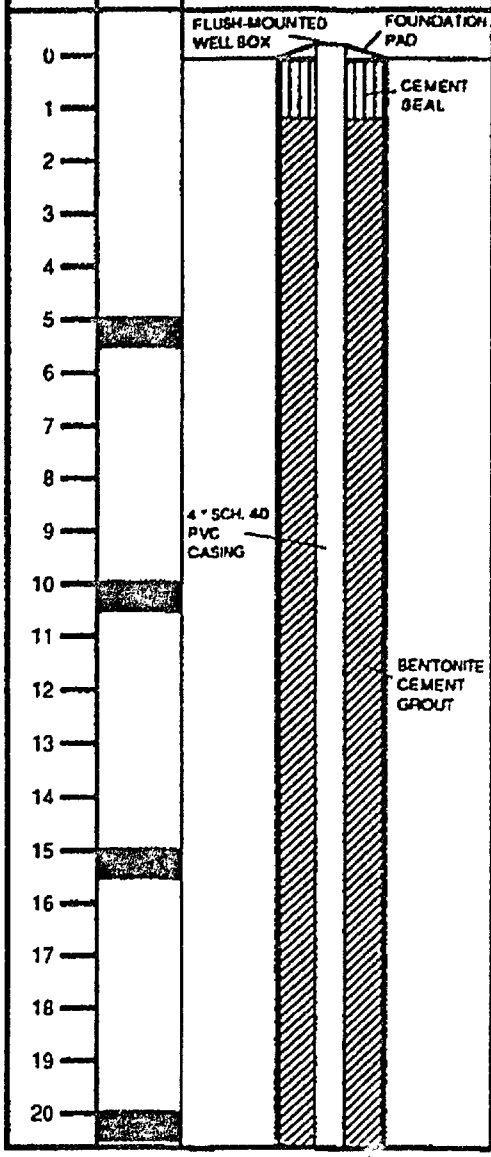
Processed by KOPY KAT

BORING LOG

SCS ENGINEERS
Environmental Consultants
3711 Long Beach Blvd.
Ninth Floor
Long Beach, CA
90807-3315
(310) 426-9544
FAX (310) 427-0805

PROJECT: ANGELES CHEMICAL
LOCATION: SANTA FE SPRINGS
JOB NUMBER: 0185016.01
GEOLOGIST / ENGINEER: B. WATTERSON
DRILLER: H-F DRILLING
DRILL RIG: FAILING (F10)
DRILLING METHOD: HOLLOW STEM AUGER

HOLE / WELL #: MW 3
DIAMETER: 11"
TOTAL DEPTH: 50'
DATE STARTED: JANUARY 7, 1994
DATE COMPLETED: JANUARY 10, 1994
SAMPLING DEVICE: 2" SPLIT SPOON
PAGE: 1 OF 3



DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
0						FILL MATERIAL (LAYER OF ASPHALT - 1" DOWN)
1						
2						
3						
4						
5			MW3-5	4/5/5	CL	GRAY/GREEN SILTY CLAY, MOIST, NO ODOR
6						
7						
8						
9						
10			MW3-10	5/7/9	ML	BROWN CLAYEY SILT, MOIST, NO ODOR OVA = 10 ppm
11						
12						
13						
14						
15			MW3-15	10/20/20	GP	LIGHT GRAY SANDY GRAVELS, SOME SILT, FINE - COARSE SAND AND PEBBLES, SLIGHTLY MOIST, NO ODOR OVA = 8 ppm
16						
17						
18						
19						LIGHT GRAY SANDY GRAVEL, SOME SILT, FINE - COARSE SAND AND PEBBLES, SLIGHTLY MOIST, NO ODOR OVA = 8 ppm
20			MW3-20	20/27/40	GP	

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BORING LOG

PROJECT : ANGELES CHEMICAL
JOB NUMBER: 0185016.01

HOLE / WELL # : MW3
PAGE : 2 OF 3

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
21		BENTONITE CEMENT GROUT				
22						
23						
24		4" SCH. 40 PVC CASING				
25			MW3-25	12/14/15	CL	GRAY GREEN CLAY, VERY MOIST, NO ODOR OVA = 10 ppm
26		BENTONITE SEAL				
27						
28						
29						
30			MW3-30	7/7/17	CL	
31						GRAY GREEN SILTY CLAY, MOIST, NO ODOR OVA = 10 ppm
32						
33						
34						
35		4" SCH. 40 PVC 0.020" SLOTTED FILTER PACK	MW3-35	6/7/14	CL	GRAY GREEN SILTY CLAY, MAY BE SATURATED STRINGERS IN SPOTS, NO ODOR OVA = 6 ppm
36						
37						
38						
39						
40			MW3-40	11/17/17	CL	BROWN SITLY CLAY, VERY MOIST, NO ODOR OVA = 6 ppm
41						
42						
43						
44						BROWN SILTY CLAY, VERY MOIST, SOME WATER (STAURATED STRINGERS?), NO ODOR OVA = 15 ppm
45			MW3-45	8/12/17	CL	

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BORING LOG

PROJECT : ANGELES CHEMICAL

JOB NUMBER. 0185016.01

HOLE / WELL # : MW 3

PAGE : 3 OF 3

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
46						
47		4" SCH. 40 PVC 0.020" SLOTTED				
48		FILTER PACK				
49						
50			MW3-50		ML	BROWN CLAYEY SILT (SATURATED STRINGERS?), VERY MOIST, NO ODOR
						TD = 50'

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BORING LOG

SCS ENGINEERS
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PROJECT: ANGELES CHEMICAL
LOCATION: SANTA FE SPRINGS
JOB NUMBER: 0185016 01
GEOLOGIST / ENGINEER: B WATTERSON
DRILLER: H-F DRILLING
DRILL RIG: FAILING (F10)
DRILLING METHOD: HOLLOW STEM AUGER

HOLE / WELL #: MW4
DIAMETER: 11"
TOTAL DEPTH: 28'
DATE STARTED: JANUARY 5, 1994
DATE COMPLETED: JANUARY 5, 1994
SAMPLING DEVICE: 2" SPLIT SPOON
PAGE: 1 OF 2

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
0		FLUSH-MOUNTED WELL BOX; FOUNDATION PAD				0-2" - ASPHALT SURFACE DARK GRAY FILL MATERIAL
1		CEMENT SEAL			CL	SILTY CLAY MATERIAL, POST HOLE DIG, NO ODOR
2						
3						
4						
5		BENTONITE WELL PLUG	MW4-5	4/4/6	CL	DARK GRAY CLAY, SOFT - MEDIUM STIFF, VERY MOIST, MILD ORGANIC ODOR
6						
7						
8						
9		4" SCH. 40 PVC CASING				
10			MW4-10	10/15/19	ML	BROWN CLAYEY SILT, SOME FINE SAND, MEDIUM DENSE, MOIST, MILD ORGANIC ODOR OVA = 100 ppm
11						
12						
13						
14						
15			MW4-15	13/20/27	SP	GREEN GRAY POORLY GRADED GRAVELY SANDS, DISCOLORED, STRONG ORGANIC ODOR OVA = 300 ppm
16						
17						
18		4" SCH. 40 PVC 0.020" SLOTTED; SAND PACK				
19						GRAY GREEN POORLY SORTED SANDY GRAVEL, DISCOLORED, STRONG ORGANIC ODOR OVA = 500 ppm
20			MW4-20	23/30/35	GM	

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PROJECT : ANGELES CHEMICAL
JOB NUMBER 0185016 01

HOLE / WELL # : MW 4
PAGE : 2 OF 2

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
21						
22						
23		SAND FILTER PACK				SATURATED SOIL - 25' BGS
24						
25		4" SCH. 40 PVC 0.020" SLOTTED PVC	MW4-25	6/14/25	GM	GRAY GREEN POORLY GRADED SANDY GRAVEL, DISCOLORED, STRONG ORGANIC ODOR OVA = 1000 ppm
26						
27						
28			MW4-18	13/18/30	CL	GRAY GREEN SILTY CLAY, SLIGHTLY MOIST OVA = 250 ppm
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						

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BORING LOG

SCS ENGINEERS
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PROJECT: ANGELES CHEMICAL
LOCATION: SANTA FE SPRINGS
JOB NUMBER: 0185016.01
GEOLOGIST / ENGINEER: B. WATTERSON
DRILLER: H-F DRILLING
DRILL RIG: FAILING (F10)
DRILLING METHOD: HOLLOW STEM AUGER

HOLE / WELL #: MW5
DIAMETER: 11"
TOTAL DEPTH: 3'
DATE STARTED: JANUARY 5, 1994
DATE COMPLETED: JANUARY 5, 1994
SAMPLING DEVICE: 2" SPLIT SPOON
PAGE: 1 OF 2

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
0		ASPHALT CAP				2" ASPHALT SURFACE FILL MATERIAL GRAVEL TO 2'
1						
2						
3			MW5-2		GC	DARK BROWN FILL - SANDY CLAY, GRAVELS
4						
5		BENTONITE WELL PLUG TO SURFACE	MW5-5	3/5/6	CL	BROWN SILTY CLAY, SOFT - MEDIUM STIFF, MOIST, NO ODOR
6						
7						
8						
9						
10			MW5-10	8/12/12	ML	BROWN CLAYEY SILT, SOME SAND AND GRAVEL MATERIAL (STRINGERS?), SLIGHTLY MOIST, NO ODOR OVA = 8 ppm
11						
12						
13						
14						
15			MW5-15		SP	BROWN CLAYEY SILT, SOME SAND AND GRAVEL MATERIAL (STRINGERS?), SLIGHTLY MOIST, NO ODOR OVA = 8 ppm
16						
17						
18						
19						
20			MW5-20	23/13/28	GM	BROWN SANDY GRAVEL, COARSE SANDS, SLIGHTLY MOIST, NO ODOR OVA = 8 ppm

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BORING LOG

PROJECT : ANGELES CHEMICAL
JOB NUMBER: 0185016.01

HOLE / WELL # : MW5
PAGE : 2 OF 2

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
21						
22						
23		BENTONITE WELL PLUG TO SURFACE				
24					GM ML	THROUGH GRAVEL TO SILTS ~ 24' BGS (NO WATER)
25			MW5-25	13/25/25	CL	GRAY GREEN CLAY, VERY STIFF, MOIST, NO ODOR TO 26.5'
26						
27						
28						
29						
30			MW5-30	13/15/15	CL	GRAY GREEN CLAY, VERY STIFF, MOIST, NO ODOR
31						DRY, NO WELL INSTALLED
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						

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BORING LOG

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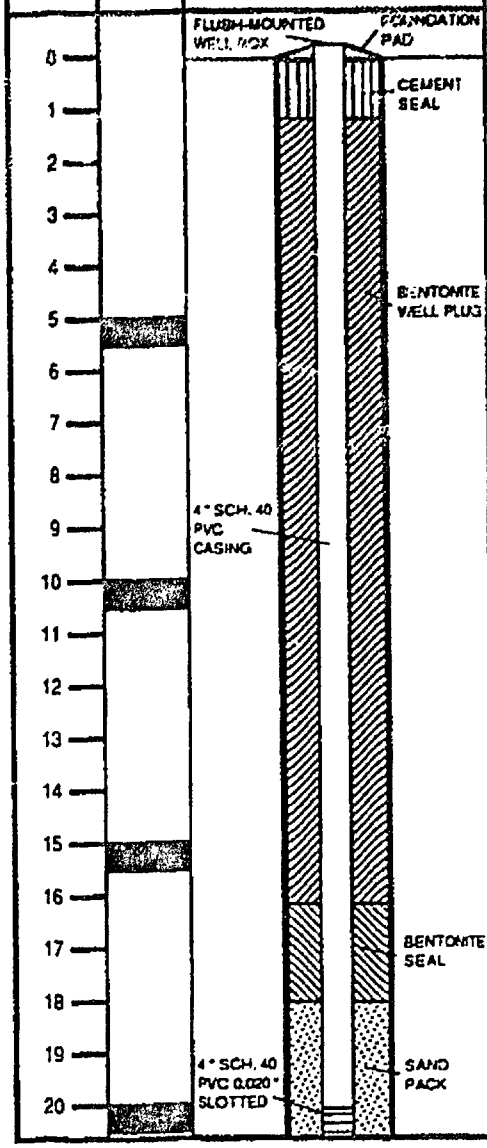
PROJECT: ANGELES CHEMICAL
LOCATION: SANTA FE SPRINGS
JOB NUMBER: 0185016.01
GEOLOGIST / ENGINEER: B WATTERSON
DRILLER: H-F DRILLING
DRILL RIG: FAILING (F10)
DRILLING METHOD: HOLLOW STEM AUGER

HOLE / WELL #: MW6
DIAMETER: 11"
TOTAL DEPTH: 30.5'
DATE STARTED: JANUARY 11, 1994
DATE COMPLETED: JANUARY 11, 1994
SAMPLING DEVICE: 2" SPLIT SPOON
PAGE: 1 OF 2



DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
0		FLUSH-MOUNTED WELL BOX; FOUNDATION PAD				0-2" - ASPHALT SURFACE DISCOLORED DARK GRAY/BLACK FILL MATERIAL, ORGANIC ODOR TO 2' BGS OVA = 150 ppm
1		CEMENT SEAL				
2						
3						
4						
5		BENTONITE WELL PLUG	MW6-5	6/8/14	CL	DARK BROWN SILTY CLAY, MOIST, NO ODOR OVA = 40 ppm
6						
7						
8						
9		4" SCH. 40 PVC CASING				
10			MW6-10	7/12/16	ML	BROWN SILTS, SOME CLAY, MOIST, NO ODOR OVA = 20 ppm
11						
12						
13						
14						
15			MW6-15	10/12/18	ML	BROWN SILTS, SOME FINE SAND, STRONG ODOR OVA = 250 ppm
16						
17		BENTONITE SEAL				
18						
19		SAND PACK; 4" SCH. 40 PVC 0.020" SLOTTED	MW6-20	12/26/37	GP	LIGHT GRAY COARSE SAND AND GRAVEL TO 1.5" PEBBLES, STRONG ODOR OVA = 500 ppm
20						

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PROJECT: ANGELES CHEMICAL
JOB NUMBER: 0185016.01

HOLE / WELL #: MW6
PAGE: 2 OF 2

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
21						
22						
23		4" SCH 40 PVC 0.020" SLOTTED; FILTER PACK				
24						
25			MW6-25	16/20/40	SP	GRAY DISCOLORED SAND, MEDIUM GRAVEL, FEW FINES, SATURATED, STRONG ODOR OVA = 700 ppm
26						
27						
28						
29						
30			MW6-30	17/20/40	ML	DARK BROWN CLAYEY SILT, MOIST, ODOR OVA = 100 ppm
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						

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BORING LOG

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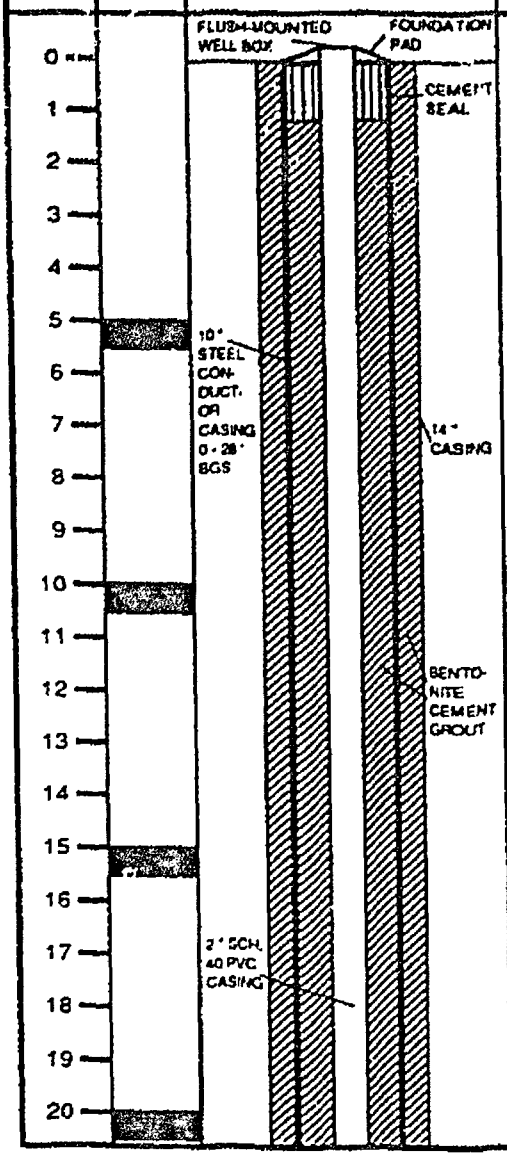
PROJECT: ANGELES CHEMICAL
LOCATION: SANTA FE SPRINGS
JOB NUMBER 0185016 01
GEOLOGIST / ENGINEER: B. WATTERSON
DRILLER: H-F DRILLING
DRILL RIG: FAILING (F10)
DRILLING METHOD: HOLLOW STEM AUGER

HOLE / WELL #: MW 7
DIAMETER: 14" TO 28'; 8" TO 55'
TOTAL DEPTH: 55'
DATE STARTED: JANUARY 6, 1994
DATE COMPLETED: JANUARY 11, 1994
SAMPLING DEVICE: 2" SPLIT SPOON
PAGE: 1 OF 3



DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
0						BKGD OVA = 5 ppm 2" ASPHALT AT SURFACE FILL MATERIAL GRAVEL AND SAND TO 2' BGS
1						
2						
3						
4						
5			MW7-5	4/5/5	CL	GRAY GREEN CLAY, SOFT, MOIST, NO ODOR
6						
7						
8						
9						
10			MW7-10	8/18/20	CL	GRAY GREEN SILTY CLAY, SOME SAND (STRINGERS?), MOIST, NO ODOR
11						
12						
13						
14						
15			MW7-15	18/26/40	SM	GRAY GREEN SILTY SAND, FINE - MEDIUM GRAINED SANDS, MOIST, MILD ORGANIC ODOR OVA = 10 ppm
16						
17						
18						
19						WHITE/GREEN WELL GRADED SANDY GRAVEL TO PEBBLE SIZE, MOIST, MILD ORGANIC ODOR OVA = 20 ppm
20			MW7-20	20/40/53	GP	

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PROJECT : ANGELES CHEMICAL
JOB NUMBER: 0185016.01

HOLE / WELL # : MW 7
PAGE : 2 OF 3

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
21						
22		10" STEEL CON-DUCT-OR CASING 0 - 28'				
23						
24						
25		14" BORING	MW7-25	1/1/26/40	GP	WHITE/GREEN WELL GRADED SANDY GRAVEL TO PEBBLE SIZE, SATURATED, MILD ORGANIC ODOR ODOR OVA = 20 ppm
26						
27					ML	SILT AND CLAY 26.5' TO CONDUCTOR CASING AT ~ 28'
28		4" SCH. 40 PVC CASING				
29		8" BORING				
30		BENTO-NITE SEAL	MW7-30	15/25/25	CL	GRAY GREEN CLAY, MOIST, NO ODOR OVA = 8 ppm
31						
32						
33						
34						
35		FILTER PACK	MW7-35	11/18/35	CL	GRAY GREEN CLAY, NO ODOR WATER IN HOLE FROM BEFORE? HARD TO DISCERN ACTUAL GW OVA = 15 ppm
36						
37						
38		4" SCH. 40 PVC 0.020" SLOTTED				
39						
40			MW7-40	12/22/22	ML	BROWN CLAYEY SILT, MOIST, NO ODOR OVA = 6 ppm
41						
42						
43						
44						
45			MW7-45	5/12/28	CL	BROWN SILTY CLAY, MOIST, NO ODOR OVA = 15 ppm

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BORING LOG

PROJECT : ANGELES CHEMICAL
JOB NUMBER: 0185018.01

HOLE / WELL # : MW7
PAGE : 3 OF 3

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
46						
47		4" SCH. 40 PVC 0.020 SLOTTED				
48						
49						
50			MW7-50	8/8/11	CL	BROWN SILTY CLAY, VERY MOIST, NO ODOR
51		FILTER PACK				
52						
53						53' - DRILLER SAYS WATER IS COMING IN STRONG
54						
55			MW7-55		ML	BROWN SILTS, SOME FINE SANDS AND CLAY, SATURATED, NO ODOR
						TD = 55'

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BORING LOG

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PROJECT: ANGELES CHEMICAL
LOCATION: SANTA FE SPRINGS
JOB NUMBER: 0185018 01
GEOLOGIST / ENGINEER: B WATTERSON
DRILLER: H-F DRILLING
DRILL RIG: FAILING (F10)
DRILLING METHOD: HOLLOW STEM AUGER

HOLE / WELL #: C P T 8
DIAMETER: 11"
TOTAL DEPTH: 29'
DATE STARTED: JANUARY 5, 1994
DATE COMPLETED: JANUARY 5, 1994
SAMPLING DEVICE: 2" SPLIT SPOON
PAGE: 1 OF 2

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
0		ASPHALT CAP				OVA BKGD - 10 ppm 2" ASPHALT SURFACE
1			CPT8-1		GC	CLAY FILL MATERIAL DARK GRAY, SOME SILT, NO ODOR
2						
3					GW	GRAY/BROWN SANDY GRAVEL, NO ODOR
4						
5		BACKFILL BENTONITE CEMENT GROUT	CPT8-5	3/5/10	CL	DARK GRAY SILTY CLAY, , MOIST, MILD ODOR
6						
7						
8						
9						
10			CPT8-10	7/78	ML	BROWN CLAYEY SILT, SOME SAND AND GRAVEL MATERIAL (STRINGERS?), SLIGHTLY MOIST, NO ODOR OVA = 8 ppm
11						
12						
13						
14						
15					ML	BROWN CLAYEY SILT, SOME SAND AND GRAVEL MATERIAL (STRINGERS?), SLIGHTLY MOIST, NO ODOR OVA = 8 ppm
16						
17						
18						
19						
20			CPT8-20	7/7/11	SW	BROWN SANDY GRAVEL , COARSE SANDS, SLIGHTLY MOIST, NO ODOR OVA = 8 ppm

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BORING LOG

PROJECT : ANGELES CHEMICAL
JOB NUMBER: 0105016.01

HOLE / WELL # : C P T 8
PAGE : 2 OF 2

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
21						
22						
23		BACKFILL BENTONITE CEMENT GROUT	CPT8-23	5/6/19	SW	SAND AND GRAVEL
24						
25					SW	SAND AND GRAVEL TO 24.5' OVA = 100 ppm (NO WATER ENCOUNTERED)
26						
27			CPT8-27	12/12/4	ML	SILTY CLAY AT 27 - 27.5 IN DRIVE SAMPLE
28						
29			CPT8-29	7/11/7	CL	SILTY CLAY
30						DRY; NO WELL INSTALLED
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						

Processed by KOPY KAT

BORING LOG

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PROJECT: ANGELES CHEMICAL
LOCATION: SANTA FE SPRINGS
JOB NUMBER: 0165016.01
GEOLOGIST / ENGINEER: B. WATTERSON
DRILLER: H-F DRILLING
DRILL RIG: FAILING (F10)
DRILLING METHOD: HOLLOW STEM AUGER

HOLE / WELL #: BH 15
DIAMETER: 11"
TOTAL DEPTH: 27'
DATE STARTED: JANUARY 5, 1994
DATE COMPLETED: JANUARY 5, 1994
SAMPLING DEVICE: 2" SPLIT SPOON
PAGE: 1 OF 2

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
0		ASPHALT CAP				BKGD OVA = 6 - 8 ppm 2" ASPHALT SURFACE
1			BH15-1		SM	FILL MATERIAL: BROWN COARSE SAND AND SILT, SWEET ODOR OVA = 100 ppm
2						
3						
4		BENTONITE CEMENT GROUT				
5			BH15-5	3/4/5	CL	BROWN CLAY, NO ODOR OVA = 15 ppm
6						
7						
8						
9						
10			BH15-10	7/11/11	CL	LIGHT BROWN SILTY CLAY, MOIST, NO ODOR OVA = 6 ppm
11						
12						
13						
14						
15			BH15-15	11/13/16	CL/ ML	LIGHT BROWN SILTY CLAY TO 15.5' SANDY SILT, SOME MEDIUM-COARSE SAND (STRINGERS?), MOIST, NO ODOR OVA = 40 ppm
16						
17						
18						
19						
20			BH15-20	12/19/26	SP	LIGHT GRAY COARSE SAND, NO RECOVERY, CUTTINGS OVA = 30 ppm

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BORING LOG

PROJECT : ANGELES CHEMICAL
JOB NUMBER: 0185016.01

HOLE / WELL # : BH 15
PAGE : 2 OF 2

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
21						
22						
23		BENTONITE CEMENT GROUT				
24						
25			BH15-25		GM	LIGHT BROWN SANDY GRAVEL, MEDIUM - COARSE SAND WITH GRAVEL AND PEBBLES, MILD ODOR OVA = 30 ppm WATER AT 26.5'
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						

Processed by KOPY KAT

BORING LOG

SCS ENGINEERS
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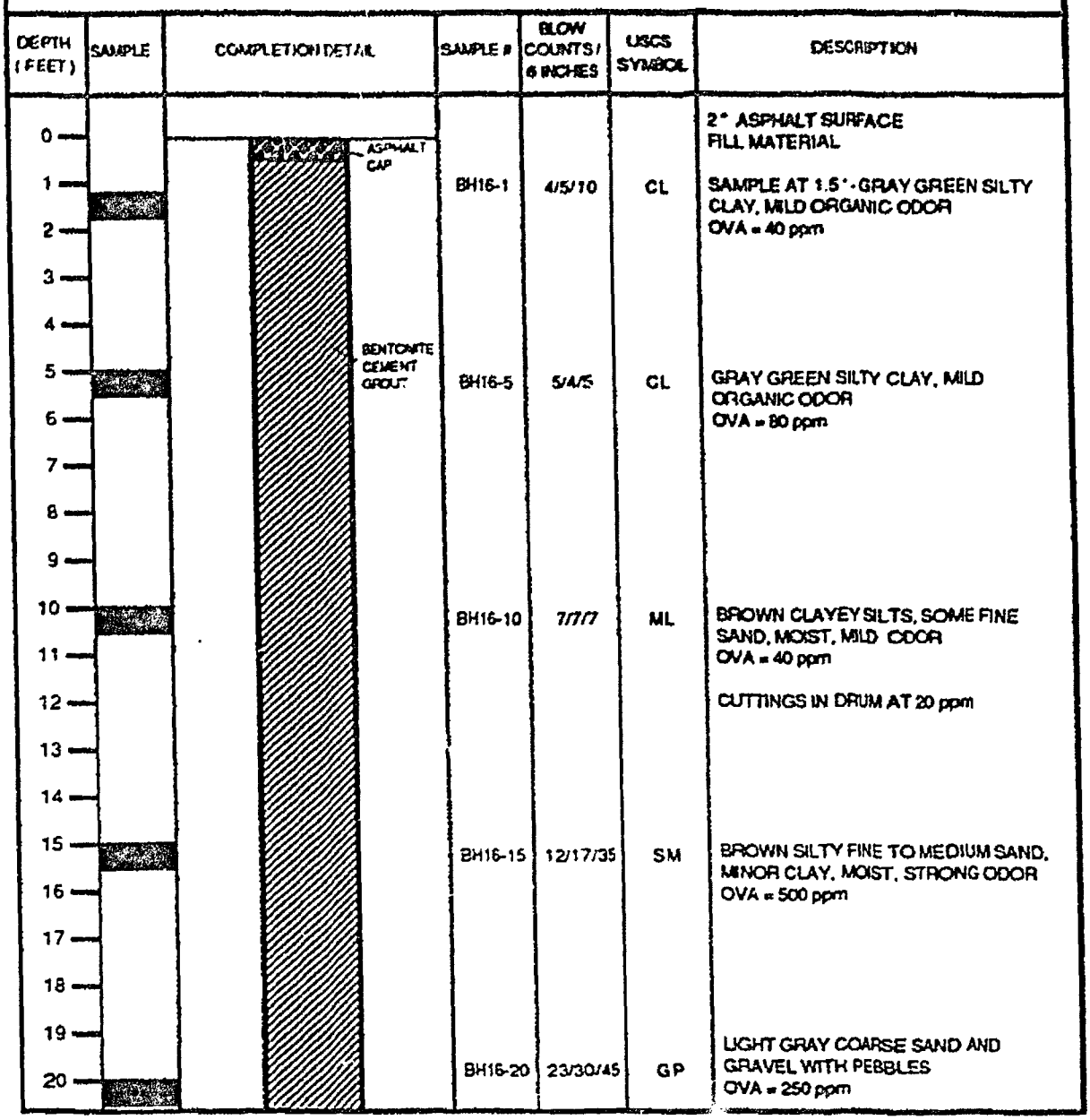
PROJECT: ANGELES CHEMICAL
LOCATION: SANTA FE SPRINGS
JOB NUMBER: 0185016 01
GEOLOGIST / ENGINEER: B. WATTERSON
DRILLER: H-F DRILLING
DRILL RIG: FAILING (F10)
DRILLING METHOD: HOLLOW STEM AUGER

HOLE / WELL #: BH16
DIAMETER: 11"
TOTAL DEPTH: 25'
DATE STARTED: JANUARY 6, 1994
DATE COMPLETED: JANUARY 6, 1994
SAMPLING DEVICE: 2" SPLIT SPOON
PAGE: 1 OF 2



DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
0						2" ASPHALT SURFACE FILL MATERIAL
1			BH16-1	4/5/10	CL	SAMPLE AT 1.5' - GRAY GREEN SILTY CLAY, MILD ORGANIC ODOR OVA = 40 ppm
2						
3						
4						
5			BH16-5	5/4/5	CL	GRAY GREEN SILTY CLAY, MILD ORGANIC ODOR OVA = 80 ppm
6						
7						
8						
9						
10			BH16-10	7/7/7	ML	BROWN CLAYEY SILTS, SOME FINE SAND, MOIST, MILD ODOR OVA = 40 ppm
11						
12						CUTTINGS IN DRUM AT 20 ppm
13						
14						
15			BH16-15	12/17/35	SM	BROWN SILTY FINE TO MEDIUM SAND, MINOR CLAY, MOIST, STRONG ODOR OVA = 500 ppm
16						
17						
18						
19						
20			BH16-20	23/30/45	GP	LIGHT GRAY COARSE SAND AND GRAVEL WITH PEBBLES OVA = 250 ppm

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BORING LOG

PROJECT : ANGELES CHEMICAL
JOB NUMBER: 0185016.01

HOLE / WELL # : BH16
PAGE : 2 OF 2

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
21						
22						
23		BENTONITE CEMENT GROUT				
24						
25			BH16-25		GP	LIGHT GRAY COARSE SAND AND GRAVEL WITH PEBBLES, GRAY GREEN (DISCOLORED), STRONG ODOR OVA = 300 ppm
26						
27						WATER AT 25.5'
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						

Processed by KOPY KAT

BORING LOG

SCS ENGINEERS
Environmental Consultants
3711 Long Beach Blvd.
Ninth Floor
Long Beach, CA
90807-2015
(310) 426-9544
FAX (310) 427-0805

PROJECT: ANGELES CHEMICAL
LOCATION: SANTA FE SPRINGS
JOB NUMBER: 0185016.01
GEOLOGIST / ENGINEER: B. WATTERSON
DRILLER: H-F DRILLING
DRILL RIG: FAILING (F10)
DRILLING METHOD: HOLLOW STEM AUGER

HOLE / WELL #: BH17
DIAMETER: 11"
TOTAL DEPTH: 25'
DATE STARTED: JANUARY 11, 1994
DATE COMPLETED: JANUARY 11, 1994
SAMPLING DEVICE: 2" SPLIT SPOON
PAGE: 1 OF 2

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
0		ASPHALT CAP				2" ASPHALT SURFACE
1			BH17-1			DARK GRAY SOILS (DISCOLORED), FILL MATERIAL (SILTS AND SAND), STRONG ORGANIC ODOR OVA = 100 ppm
2						
3						
4		BENTONITE CEMENT GROUT				
5			BH17-5	6/10/10	CL	DARK BROWN (DISCOLORED?) SILTY CLAY, STRONG ORGANIC ODOR OVA = 200 ppm
6						
7						
8						
9						
10			BH17-10	7/10/13	ML	BROWN CLAYEY SILT, MOIST, SLIGHT ODOR OVA = 40 ppm
11						
12						
13						
14						
15			BH17-15	15/22/28	SM	DARK BROWN AND DARK GRAY (DISCOLORED?) SILTY SANDS, FINE SANDS, MOIST, ORGANIC ODOR OVA = 150 ppm
16						
17						
18						
19						LIGHT BROWN GRAVELS (TO 2") AND MEDIUM - COARSE SAND, MOIST, ORGANIC ODOR OVA = 50 ppm
20			BH17-20	19/38/50	GP	

Processed by KOPY KAT

BORING LOG

PROJECT: ANGELES CHEMICAL

JOB NUMBER: 0185018.01

HOLE / WELL #: BH17

PAGE: 2 OF 2

DEPTH (FEET)	SAMPLE	COMPLETION DETAIL	SAMPLE #	BLOW COUNTS / 6 INCHES	USCS SYMBOL	DESCRIPTION
21						
22						
23		BENTONITE CEMENT GROUT				
24						
25			BH17-25	78/100/ END	GM	COARSE SAND AND GRAVEL, SOME SILT AND FINE SAND, SATURATED, MILD ODOR OVA = 50 ppm
26						
27						GROUNDWATER ~ 24'
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						

Processed by KOPY KAT

WELL SAMPLING RECORD

SCS ENGINEERS
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(310) 426-9544
FAX (310) 427-0206

PROJECT Angeles Chemical DATE 2-3-94
JOB NUMBER 01B5016.01 WEATHER Rain
PERSONNEL B. Watterson / S. McGovern

WELL NO. MW-1 TIME 3:35 pm
DIAMETER OF WELL 4" STATIC WATER LEVEL 30.05'
DEPTH OF WELL 60' VOLUME/FOOT .65
FEET OF WATER IN WELL 29.95' WATER VOLUME IN WELL 1947 gal

PRODUCT PRESENT YES ✓ NO ___ PRODUCT TYPE unknown
STATIC PRODUCT THICKNESS IN WELL 29.98'
TRUE PRODUCT THICKNESS 0.07'

PURGING PRIOR TO SAMPLING

EQUIPMENT	TIME/GAL	pH	EC	TEMP (F°)
START PURGE TIME				
END PURGE TIME				
AVERAGE PUMPING RATE				
VOLUME WATER REMOVED (GALS)				

SAMPLING

EQUIPMENT 1.67" x 2.5' teflon bailer TIME 3:45 pm
SAMPLING NOS./WELL NOS. MW-1 8015 mod. (Product specified)
MW-1 624 (for clear water).

NOTES/COMMENTS Product yellow tint. Water clear beneath. Strong gasoline-like odor.

Processed by KOPY KAT

WELL SAMPLING RECORD

SCS ENGINEERS
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(310) 426-9544
FAX (310) 427-0805

PROJECT Angeles Chemical DATE 2-3-94

JOB NUMBER 0185016.01 WEATHER Overcast

PERSONNEL B. Watterson / S. McGovern

WELL NO. MW-2 TIME 7:45 AM

DIAMETER OF WELL 4" STATIC WATER LEVEL 28.8

DEPTH OF WELL 50' VOLUME/FOOT .65

FEET OF WATER IN WELL 21.2 WATER VOLUME IN WELL 13.8 gal

PRODUCT PRESENT YES ___ NO ✓ PRODUCT TYPE ___

STATIC PRODUCT THICKNESS IN WELL ___

TRUE PRODUCT THICKNESS ___

PURGING PRIOR TO SAMPLING

EQUIPMENT 2" [illegible]

START PURGE TIME 7:52 AM

END PURGE TIME 8:21 AM

AVERAGE PUMPING RATE 2-3 gal/min

VOLUME WATER REMOVED (GALS) 45

TIME/GAL	pH	EC	TEMP (F°)
8:10/20	7.31	1990	65.4
8:13/30	7.52	2010	66.9
8:18/40	7.67	2010	66.7
8:21/45	7.60	2040	68.2

– Pump warm?

SAMPLING

EQUIPMENT 2" Grundfos (for gen. amp) Reformulated for (24) TIME 8:25 AM

SAMPLING NOS./WELL NOS. MW-2 624

MW-2 Gen. Quality

NOTES/COMMENTS Slightly cloudy. Note – well slow to recharge. Note alternating clear & cloudy. Moving [illegible].

Processed by KOPY KAT

WELL SAMPLING RECORD

SCS ENGINEERS
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PROJECT Angeles Chemical
DATE 2-3-94
JOB NUMBER 0185016.01
WEATHER overcast
PERSONNEL B. WATTERSON / S. McGOVERN

WELL NO. MW-3
TIME 9:15 AM
DIAMETER OF WELL 4"
STATIC WATER LEVEL 29.7'
DEPTH OF WELL 50'
VOLUME/FOOT .65
FEET OF WATER IN WELL 20.3'
WATER VOLUME IN WELL 13.2 gal

PRODUCT PRESENT YES ___ NO ✓
PRODUCT TYPE ___
STATIC PRODUCT THICKNESS IN WELL ___
TRUE PRODUCT THICKNESS ___

PURGING PRIOR TO SAMPLING

EQUIPMENT Grunfos
START PURGE TIME 9:19 AM
END PURGE TIME 9:53 A
AVERAGE PUMPING RATE 2-3 gal/min
VOLUME WATER REMOVED (GALS) 45

TIME/GAL	pH	EC	TEMP (F°)
9:30/25	7.44	2100	67.0
9:40/35	7.34	2190	67.5
9:50/40	7.27	2180	67.4

SAMPLING

EQUIPMENT 2" Grunfos for gen mins
Teflon bailer for 624
TIME 10.00 AM
SAMPLING NOS./WELL NOS. MW-3 624
MW-3 Gen. Quality.

NOTES/COMMENTS Slower recharge than MW-2. Very slow. Stopped to allow recharge on numerous occasions. Very slightly cloudy little or no fines.

Processed by KOPY KAT

WELL SAMPLING RECORD

SCS ENGINEERS
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(310) 426-9544
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PROJECT Angeles Chemical DATE 2-3-94
JOB NUMBER 01P5016.01 WEATHER Overcast
PERSONNEL R. WATTERson/S. McGovern

WELL NO. MW-4 TIME 12:30
DIAMETER OF WELL 4" STATIC WATER LEVEL 23.35'
DEPTH OF WELL 30' VOLUME/FOOT 0.65
FEET OF WATER IN WELL 6.65' WATER VOLUME IN WELL 4.3 gal

PRODUCT PRESENT YES ___ NO ✓ PRODUCT TYPE ___
STATIC PRODUCT THICKNESS IN WELL ___
TRUE PRODUCT THICKNESS ___

PURGING PRIOR TO SAMPLING

EQUIPMENT Grunfos (2") Pump

	TIME/GAL	pH	EC	TEMP (F°)
START PURGE TIME 12:45 pm	1:09/5	7.24	1780	70.4
END PURGE TIME 1:15 Pm	1:15/6	7.02	1780	68.4
AVERAGE PUMPING RATE 2 gal/min				
VOLUME WATER REMOVED (GALS) 6.5 GAL				

SAMPLING

EQUIPMENT Grunfos (gen mins/quality) TIME 1:30 Pm
1.67" x 2.5' teflon bailer
SAMPLING NOS./WELL NOS. MW-4 (624)
MW-4 (quality)

NOTES/COMMENTS Grey colour tint to water. NOT cloudy per se.
Very slow to recharge. Pumped dry after 4 gallons. NO fines.
Strong sulfuric odor.

Processed by KOPY KAT

WELL SAMPLING RECORD

SCS ENGINEERS
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Ninth Floor
Long Beach, CA
90807-2316
(310) 426-9544
FAX (310) 427-0305

PROJECT Angeles Chemical DATE 2-3-94

JOB NUMBER 0185016.01 WEATHER overcast + rain

PERSONNEL B. WATTERSON / S. McGovern

WELL NO. MW-6 TIME 2:10 pm

DIAMETER OF WELL 4" STATIC WATER LEVEL 24.85'

DEPTH OF WELL 30' VOLUME/FOOT .65

FEET OF WATER IN WELL 5.15' WATER VOLUME IN WELL 3.35 gal

PRODUCT PRESENT YES ___ NO ✓ PRODUCT TYPE ___

STATIC PRODUCT THICKNESS IN WELL ___

TRUE PRODUCT THICKNESS ___

PURGING PRIOR TO SAMPLING

		TIME/GAL	pH	EC	TEMP (F°)
EQUIPMENT	Grunfos. (2")				
START PURGE TIME	2:15 pm	2:18/3	7.05	5100	68.8
END PURGE TIME	2:30 pm	2:21/5	6.81	5050	70.6
AVERAGE PUMPING RATE	2-3 gal/min	2:25/8	7.00	5100	70.8
VOLUME WATER REMOVED (GALS)	14				

SAMPLING

EQUIPMENT Grunfos pump + hose / 1.67" x 2.5' teflon bailer TIME 2:28 pm

SAMPLING NOS./WELL NOS. MW-6 624 (bailer) Dup's collected (MW6-D)
MW-6 water quality (grundfos)

NOTES/COMMENTS Strong solvent [illegible] Clearer than MW-4, but still has grey discrimination. Good recharge compared to other wells. Pinsate sample collected following bailer scan.

Processed by KOPY KAT

WELL SAMPLING RECORD

SCS ENGINEERS
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FAX (310) 427-0905

PROJECT Angeles Chemical DATE 2-3-94
JOB NUMBER 0185016.01 WEATHER Overcast
PERSONNEL B. Watterson/S. McGovern

WELL NO. MW-7 TIME 11:00
DIAMETER OF WELL 2" STATIC WATER LEVEL 24.525
DEPTH OF WELL 55' VOLUME/FOOT 0.16
FEET OF WATER IN WELL 30.48 WATER VOLUME IN WELL 4.8 gal

PRODUCT PRESENT YES ___ NO ✓ PRODUCT TYPE ___
STATIC PRODUCT THICKNESS IN WELL ___
TRUE PRODUCT THICKNESS ___

PURGING PRIOR TO SAMPLING

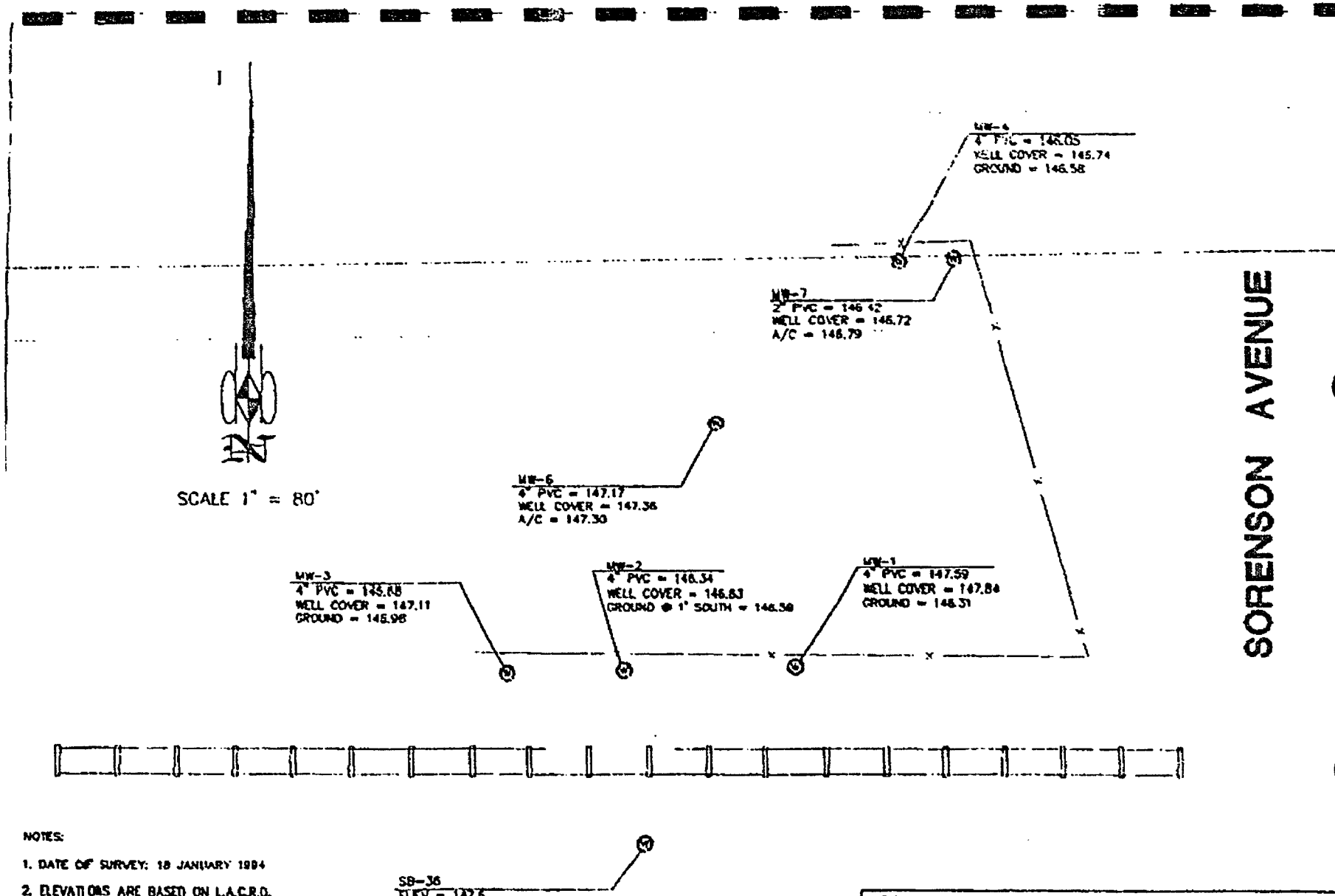
	TIME/GAL	pH	EC	TEMP (F°)
EQUIPMENT Grunfos (2") Pump				
START PURGE TIME 11:05 Am	11:40/22	7.82	2190	70.8
END PURGE TIME 11:47 Am	11:42/24	7.51	2160	70.9
AVERAGE PUMPING RATE	11:45/26	7.45	2230	71.7
VOLUME WATER REMOVED (GALS) 27				

SAMPLING

EQUIPMENT Grunfos (quality) TIME 11:55 Am
1.67' x 2.5' teflon bailer (624)
SAMPLING NOS./WELL NOS. MW-7 624
MW-7 Quality

NOTES/COMMENTS Very cloudy/silty sulfur/sewage-type odor. Pumped dry @ about 18 gallons.

Processed by KOPY KAT



NOTES:

1. DATE OF SURVEY: 18 JANUARY 1994
2. ELEVATIONS ARE BASED ON L.A.C.R.D. BENCHMARK NO. CY7443 NEAR THE CENTERLINE INTERSECTION OF SORENSON AVENUE AND JOHN STREET ELEV = 148.64 (BENCHMARK INFORMATION PROVIDED BY SCS)
3. PVC ELEVATIONS WERE TAKEN AT A NOTCH OR ON THE NORTH SIDE OF THE PIPE
4. GROUND OR A/C SHOTS WERE TAKEN AT 1' NORTH OF THE MONITOR WELL UNLESS OTHERWISE INDICATED

MAP FOR

SCS ENGINEERS

MONITOR WELL SURVEY

ANGELES CHEMICAL, SANTA FE SPRINGS

DULIN & BOYNTON
LICENSED SURVEYORS

Processed by KOPY KAT

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